

A Report of the Mid-Term Review

of

**The Eastern and Central Africa
Programme for
Agricultural Policy Analysis
(ECAPAPA)**

to

The Executive Secretary

The Association for Strengthening Agricultural Research in Eastern and
Central Africa
(ASARECA)

by

Dr. Adrian W. Mukhebi (*Mid-Term Review Team Leader*)

Executive Director, Kenya Agricultural Commodities Exchange, Kenya
amukhebi@eafex.or.ke

Prof. Hamid H.M. Faki

Research Professor, Agricultural Research Corporation, Sudan
hfaki@hotmail.com

Prof. William A. Masters

Associate Professor, Purdue University, USA
wmasters@purdue.edu

May 28, 2001

Table of Contents

Acronyms and Abbreviations	iii
Executive summary.....	1
1. Introduction: Objectives and Procedures of the Mid-Term Review	6
1.1. Objectives	6
1.2. Procedures.....	6
2. ECAPAPA to date.....	9
2.1. Preamble: History, Objectives and Structure.....	9
2.2. Activities/projects Undertaken	10
2.3. Results and Impact.....	12
2.4. Some Stakeholders' Views	12
3. ECAPAPA's Future	19
3.1. A Vision for ECAPAPA's Future.....	19
3.2. ECAPAPA's Competitive Advantage	20
3.3. A Novel Framework for ECAPAPA's Activities	21
3.4. Key Policy Research Issues for ECAPAPA	23
3.5. Implementation of ECAPAPA's Activities	32
3.6. Performance Targets and Expected Outputs.....	36
3.7. Expected Impacts and Criteria for Programme Evaluation	40
3.6 Proposed Results Framework	41
Annex 1. Background Data on Agricultural Research in East and Central Africa....	43
Annex 2. Terms of Reference for the ECAPAPA Mid-Term Review	52
Annex 3. Schedule of Activities and Stakeholder Interviews	57
Annex 4. Questionnaire Used to Solicit Stakeholder Views through E-mail	63
Annex 5. Some of the Documents Consulted	65

Acronyms and Abbreviations

AERC	African Economic Research Consortium
AHI	African Highlands Initiative
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
ASIPs	Agricultural Sector Improvement Programs
ASTI	Agricultural Science and Technology Indicators
ATPS	African Technology Policy Studies (Network, Nairobi)
CD	Committee of Directors (ASARECA)
CGIAR	Consultative Group on International Agricultural Research
CIP	International Potato Centre
COMESA	Common Market for Eastern and Southern Africa
CU	Coordination Unit (ECAPAPA)
DRD	Department of Research and Development, Tanzania
EARO	Ethiopian Agricultural Research Organization
EARRNET	Eastern African Root-crops Research Network
ECA	Eastern and Central Africa region (ASARECA/ECAPAPA operational region)
ECAPAPA	Eastern and Central Africa Programme for Agricultural Policy Analysis
EDRI	Ethiopian Development Research Institute
EPRC	Economic Policy Research Centre, Uganda
ESRF	Economic and Social Research Foundation , Tanzania
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
IARCs	International Agricultural Research Centres
ICRAF	International Centre for Research in Agroforestry
IDRC	International Development Research Centre
IFPRI	International Food Policy Research Institute
IITA	International Institute for Tropical Agriculture
ILRI	International Livestock Research Centre
ISNAR	International Service for National Agricultural Research
KARI	Kenya Agricultural Research Institute
LDCs	Least Developed Countries
MENA	Middle East & North Africa
NARIs	National Agricultural Research Institutes
NARO	National Agricultural Research Organization, Uganda
NARS	National Agricultural Research Systems
NGO	Non-Governmental Organization
OSSRESA	Organization for Social Science Research in East and Southern Africa
PAM	Policy Analysis Matrix
PMA	Plan for the Modernization of Agriculture, Uganda
R&D	Research and Development
RFP	Request for Proposals
RT	Review Team (ECAPAPA Mid-Term Review Team)
SSA	Sub-Saharan Africa
TOR	Terms of Reference

USAID	United States Agency for International Development
USAID/AFR-SD	USAID/Africa Office for Sustainable Development
USAID/REDSO-ESA	USAID Regional Economic Development Support Office
WTO	World Trade Organization

A Report of the Mid-Term Review of ECAPAPA

A. W. Mukhebi, H.H.M. Faki and W.A. Masters
(May 28, 2001)

Executive Summary

The Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA) was established by the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA) in late 1997. The goal of ECAPAPA was to improve the policy environment in the region for the purpose of enhancing agricultural technology generation and adoption, to raise economic growth and reduce poverty and environmental degradation. ECAPAPA functions with a small Coordinating Unit (a Coordinator, a Program Assistant, and a Secretary), which mobilizes donor resources and funds collaborative activities to achieve its goals. Total Programme budget in 2001 is about US\$647,000.

The ASARECA Secretariat engaged a three-man Review Team (RT) consisting of Dr. Adrian W. Mukhebi, Executive Director of the Kenya Agricultural Commodity Exchange (Team Leader), Prof. Hamid H. M. Faki, Research Professor at the Agricultural Research Corporation of Sudan and Prof. William A. Masters of Purdue University, U.S.A. to conduct a Mid-Term Review of ECAPAPA. The purpose of the Mid-Term Review was to assist ECAPAPA, and the broader ASARECA coalition, identify any mid course corrections that might be needed to ensure that the efforts and directions of ECAPAPA achieve a strategic and meaningful impact on the performance of the agricultural sector in the ECA region, and enhance the capacity of the research systems in particular to service the policy interests of the region over the next five to ten years.

The RT started its work on May 6, 2001, and submitted its report to the Executive Secretary of ASARECA on May 28, 2001. To help the RT achieve its objective, the ASARECA Secretariat and the ECAPAPA Coordinating Unit made introductory presentations to the team, provided an exhaustive collection of documents, and made arrangements for the team to meet with selected stakeholders in Uganda, Kenya, Tanzania and Ethiopia. The RT added a number of additional interviews to the schedule, and also sent an email questionnaire to a list of approximately 280 stakeholders who receive the ECAPAPA Newsletter. Responses to the email questionnaire (41 received) were kept confidential by means of a temporary email account, to which only the RT had access. For interviews in Uganda, Kenya and Ethiopia, the review team was accompanied by Dr. Abdelmoneim Taha, ASARECA's Monitoring and Evaluation specialist.

The RT found that ECAPAPA's activities have already had a substantial beneficial effect on the region's agricultural policy choices and policy-making processes. The policy information exchange, especially through the weekly electronic service, was highly valued by most stakeholders contacted. The project on the harmonization and rationalization of seed policies in East Africa is the principal area in which ECAPAPA has had a substantial impact. Prior to ECAPAPA's interventions, national seed systems restricted the flow of new germplasm from researchers to farmers, severely limiting productivity growth. ECAPAPA was able to seize an opportunity

created by previous analyses and by the re-establishment of the East African Community, to bring together the key individuals responsible for seed registration, certification, multiplication and trade in Kenya, Uganda and Tanzania, and help them reach agreement on how to implement desired reforms. Press clippings and statements from policymakers and seed trade participants, as well as the RT interviews, testify to the value of the resulting changes. Without ECAPAPA's intervention, these reforms would have been implemented much later if at all. ECAPAPA is currently engaged in deepening the reforms from those implemented at the agency level to those requiring legislative changes, and in extending the reforms to a second tier of countries outside the EAC.

For ECAPAPA to achieve sustained impact, its workplan will need to be guided by a more specific framework describing the process of policy change it seeks to influence, and the type of intervention needed to operate cost-effectively in each issue area. The RT believes that the framework and the associated broad workplan should meet both of ECAPAPA's core objectives: building capacity for agricultural research and policy analysis in the long run, as well as achieving policy change through analysis, dialogue and action in the short run. We see no necessary contradiction between these two objectives; indeed they are mutually reinforcing in the framework we propose.

The framework proposed by the RT divides the policy-change process into four distinct elements or "stages": *policy dialogue* (sharing data and analyses across countries and institutions), *policy actions* (implementing desired policies), *policy analysis* (assessing policy options) and *policy data* (documenting policy effects). ECAPAPA's activities to date have focused on *policy actions* to harvest the "low-lying fruit" first of seed-sector harmonization, *analyses* through competitive grants, and *dialogue* through the newsletter, occasional publications and regional meetings.

Using this framework leads to specific suggestions for the kinds of intervention by ECAPAPA that are most needed to facilitate the whole policy-change process, with capacity-building as an inherent feature of those interventions. In this way we provide clear priorities for action, identifying the issues in which ECAPAPA could best achieve rapid and durable results.

Starting from the point of "picking the low fruit" first we outline likely projects and activities that ECAPAPA should undertake under each framework stage. In practice, we see ECAPAPA continuing or initiating projects or activities in all the four stages simultaneously. The details of implementation mechanisms are suggested in Section 3 of the Mid Term Report.

Policy dialogue: strengthening linkages between analysis and action

ECAPAPA uses various means, both electronic and hard-copy, to exchange policy related information in the region. The RT believes that this is the *stage* at which ECAPAPA could begin to improve for immediate impact (*picking the low fruit*). Accordingly, to help guide analyses towards policy needs, the RT proposes an inter-related set of activities that together can create a more effective marketplace for ideas, through which policy goals are translated into incentives for higher-quality, more relevant research. The proposed set of activities consists of:

- Improving ECAPAPA's weekly newsletter
- Funding the creation and dissemination of short (1 to 4 page) "Policy Memos"
- Funding the establishment of an ECAPAPA "Working Paper" series
- Funding the establishment of an Eastern and Central Africa Journal of Rural Development
- Funding annual Policy Forums

The key intermediate result from the policy-dialogue initiative is the greater availability and use of higher-quality policy analysis by policy-makers across the region. ECAPAPA should develop quantitative targets in terms of the number of Policy Memos and Working Papers produced and then requested by others, as well as the number of requests for the journal and press articles or other coverage of the Policy Forums.

Policy action: strengthening implementation of desired policy changes

Where there is widespread agreement on the direction of policy changes, e.g., the seed harmonization case, implementation may require direct negotiations amongst policy actors. ECAPAPA should undertake projects in the following areas to promote regional trade:

- Continuation of the seed harmonization project
- Rationalization and harmonization of trade policies, regulations and procedures, grades and standards for major commodities of trade in the ECA region (e.g. fertilizer, maize).

The most important intermediate results from policy harmonization are changes in institutional practices such as rules governing central oversight of customs officials, or the scheduling of railcars and cargo services. In some cases, intermediate results will include legislative or administrative mandates as well.

Policy analysis: strengthening knowledge to inform for policy choices

The stakeholder interviews revealed very large gaps in local policy-makers' and policy analysts' knowledge of the comparative performance of alternative public investment options or policy changes. Some of the key such policy areas for project development are:

- Investment levels in public goods, e.g., in R&D, education, health, transport infrastructure
- Institutional arrangements, e.g., land tenure systems, market structure, intellectual property rights
- Response to external change, e.g., WTO, AGOA, Lome Convention
- Response to internal change, e.g., HIV/AIDS, regional integration
- Natural resource management and use, e.g., responses to drought shocks, shared resources such as Lake Victoria and land tenure systems.

On these and other issues, we propose that ECAPAPA call for “mixed teams” of researchers to apply for competitive grants, or conduct commissioned studies where desirable, i.e. where expertise in NARS to adequately address the issue is lacking.

The key intermediate results from this *policy-analysis* stage would be the new kinds of evidence (information) brought into regional policy debates, and used in policy-making.

Policy data: gathering evidence of technology impact and spillover, and providing information to inform policy choices

When asked about the impact of technical change or policy actions in and across countries, ECAPAPA’s stakeholders repeatedly stressed the almost complete lack of reliable, systematic data through which to say how much any particular technology (such as hybrid maize) or policy change (such as market liberalization) was affecting farm production, household well-being or environmental conditions. As a result, policy making is made in a near vacuum of facts about how government investments and policy choices actually affect productivity, welfare and other social goals. Policy choices are guided by opinion rather than data.

To equip policymakers and analysts with more reliable facts about the effects of agricultural technologies and policy changes of their interest over time and across countries, we propose that ECAPAPA initiate a substantial effort to add farm-technology data to existing census and survey efforts. Governments and donors already invested heavily in many kinds of data, notably demographic surveys, agricultural censuses, and agricultural information systems. But there is very little evidence on the impacts of new technology and policy change.

The key intermediate results from this activity would be the direct use of new survey data in policy debates (through citation of survey averages), and the discovery of new findings from the data (through analysis of survey data). Ultimate impacts would be better-informed policymaking, and hence higher rates of growth and poverty alleviation. Specific categories of policies to be informed are government investments and regulations affecting (a) technology adoption and spillover across regions and countries, (b) input supply and prices across regions and countries, and (c) product supply, demand and prices across regions and countries.

The RT identified some constraints to the successful implementation of ECAPAPA’s activities, and proposes remedies. The constraints cut across many of ECAPAPA’s activities. The RT found many stakeholders concerned about costly delays, reporting requirements, and other kinds of friction inhibiting implementation. Especially highlighted by some institutional stakeholders was the divergence in some accounting procedures between ASARECA and collaborating institutions. To facilitate ASARECA’s task, ECAPAPA’s contracts should use a “purchase order” concept wherever possible, using technical criteria rather than cost accounting to support the disbursement of funds. For example, a grant could specify that funds are to be disbursed in three tranches -- one third on signature of a grant agreement acceptable to the ASARECA secretariat, another third on receipt of an interim progress report acceptable to the ECAPAPA coordinator, and a final payment on receipt of the research output judged acceptable by outside reviewers. Actual cost accounting could

be bypassed entirely, that is, left to the accounting procedures of the collaborating institution, if the technical criteria are sufficiently stringent. To the extent that cost accounting is still needed (for large contracts, or where technical criteria are impractical to impose), we suggest that ASARECA should prepare a very clear, concise set of “contract guidelines” which could be sent to all contractors who submit successful proposals, specifying exactly what are the cost and accounting guidelines for each kind of activity.

An important question is whether the current size and composition of the Coordinating Unit is appropriate for implementing the proposed framework. The RT believes that the Coordinating Unit’s role should remain one of *coordination and dissemination*, rather than implementation of policy research by itself.

The framework outlined in this Mid-Term Review is expected to help define ECAPAPA’s role more precisely, and in so doing permit a substantial scaling-up of ECAPAPA’s activities. Expansion is needed because the ECA region is much larger than can be effectively reached at ECAPAPA’s current level of capacity. The RT believes that a larger programme along the lines of the proposed framework would be desirable, and expansion would call for an additional professional position. The candidate should be an experienced policy research analyst, who would backstop the technical activities of the programme. At the very least, an alternative path would be to recruit a professional Programme Officer responsible for all publications.

ECAPAPA should continue strengthening its liaison with policy-analysis expertise in the region for more effective operation in the framework of a regional policy analysis open network or a regional policy analysis group. The group of socio-economists currently engaged in ASARECA’s networks should form the core of the open network, linked to socio-economists and policy analysts from NARS and other policy research institutions in the region.

Mid-Term Review of ECAPAPA

1. Introduction: Objectives and Procedures of the Mid-Term Review

1.1 Objectives

The objective of this Mid-Term Review, as stated in its Terms of Reference (see annex 2 for full text), is:

to assist ECAPAPA and the broader ASARECA coalition identify mid course corrections needed (if any) to ensure that the efforts and directions that ECAPAPA is taking have strategic and meaningful impact on the performance of the agricultural sector in the ECA region, and the capacity of the research systems in particular to service the policy interests of the region.

The TOR also specify that the Mid-Term Review should

inform consultations among ECAPAPA stakeholders to identify strategic targets and interventions in agricultural policy, that could reasonably be expected to be successful and could be addressed through ECAPAPA.

A set of more specific goals are also spelled out in the TOR:

- a. Formulate and review options for a prioritized regional agricultural policy agenda for ECAPAPA and ASARECA for the next 5 to 10 years.*
- b. Identify illustrative performance targets as well as the type and level of impact that could be expected and measured from a regional policy agenda in the medium and long term.*
- c. Identify best practices to support successful implementation of a prioritized regional agricultural policy agenda.*

1.2 Procedures

The Review Team (RT) consisted of Dr. Adrian W. Mukhebi, Executive Director of the Kenya Agricultural Commodity Exchange (team leader), with Prof. Hamid H.M. Faki of the Agricultural Research Corporation in Sudan, and Prof. William A. Masters of Purdue University. To help achieve the RT achieve its objectives, the ASARECA Secretariat and the ECAPAPA Coordinating Unit made introductory presentations to the team, provided an exhaustive collection of documents, and made arrangements for the team to meet with selected stakeholders in Uganda, Kenya, Tanzania and Ethiopia.

The RT added a number of additional interviews to the schedule, and also sent an email questionnaire to a list of approximately 280 stakeholders who receive the ECAPAPA newsletter. Responses to the email questionnaire were kept confidential by means of a temporary email account (MidTermReview@hotmail.com), to which only the RT had access. For interviews in Uganda, Kenya and Ethiopia, the RT was accompanied by Dr. Abdelmoneim Taha, ASARECA's Monitoring and Evaluation specialist.

Logistical arrangements for the review were superb.¹ The RT was able to follow an efficient and intensive schedule, visiting personally with 53 individuals representing 34 distinct institutions (including ASARECA/ECAPAPA staff), in four countries. These arrangements, and the warmth with which the RT was received in each country, are in themselves important evidence of the range and depth of ECAPAPA's linkages in the region, and the goodwill that its activities have generated.

Annex 3 provides a complete list of the RT meetings, with contact information for each interview. The following key stakeholder groups were represented:

- **National Agricultural Research Institutes:** The Directors-General, with their Deputies or Heads of Socio-Economics, for the NARO in Uganda, KARI in Kenya, DRD in Tanzania and EARO in Ethiopia.
- **Government officials:** Policy-makers responsible for the drafting and implementation of the national poverty-reduction program² in the Ministries of Finance and Agriculture in Uganda, as well as top policy analysts reporting directly to Ministers of Finance or Agriculture in Kenya, Tanzania and Ethiopia.
- **Universities:** Deans, Department Heads, and key faculty members at Makerere University, University of Nairobi, Sokoine University and Addis Ababa University.
- **National policy-research institutions:** Key researchers at the Economic Policy Research Centre (EPRC) in Uganda, the Economic and Social Research Foundation (ESRF) in Tanzania, and the Ethiopian Development Research Institute (EDRI) in Ethiopia.
- **Regional policy-research networks:** Top staff at the African Economic Research Consortium (AERC) in Nairobi, the Organization for Social Science Research in East and Southern Africa (OSSREA) in Addis Ababa, and (through IDRC), the African Technology Policy Studies (ATPS) network in Nairobi.
- **International agricultural-research centers:** The Head of socio-economics at ILRI headquarters in Addis, and the regional network coordinators for IFPRI (Vision 2020), and ASARECA networks implemented by different IARCs, e.g., EARNNET (IITA), Technology Transfer Project (CIP) and AHI (ICRAF).
- **Farmers' Unions:** Leaders of the national farmers' unions of Uganda and Kenya.
- **Agribusiness:** Officials of the Seed Trade Association and a fertilizer/crop chemicals firm in Kenya.
- **Consultants:** Economists working as private consultants in Uganda, Kenya and Tanzania.
- **Donors:** The cognizant programme officers of USAID/REDSO and IDRC; and in the case of USAID/REDSO, with their supervisors and advisors.
- **Others:** The coordinator of Sasakawa Global 2000 in Ethiopia, and the Private Sector Trade Policy Project in Uganda.

¹ Appointments, travel and accommodation arrangements were made efficiently and at low cost by ECAPAPA and ASARECA staff. Transport was provided in Uganda by the ECAPAPA car and driver, in Kenya by Dr. Mukhebi's personal car, in Tanzania by taxi and by the Sokoine University liaison office, and in Ethiopia by an ILRI car and driver.

² Several countries in the ECA region are enrolled in HIPC debt-reduction programs, requiring the drafting and implementation of Poverty Reduction Strategy Papers (PRSPs) as a condition for debt cancellation.

The interviews were candid and wide-ranging, as described in Section 2 of this report. Discussions typically lasted for 60-90 minutes, and many thanks are due to these respondents for having taken so much time to visit with the RT, as well as to the staff of the ASARECA Secretariat and the ECAPAPA Coordinating Unit for their professionalism, dedication and hospitality in supporting this review.

2. ECAPAPA to Date

2.1 Preamble - History, Objectives and Structure

The documents reviewed by the RT reveal the history, objectives and structure of the Eastern and Central Africa Programme for Agricultural Policy Analysis (ECAPAPA). As a programme of the *Association for Strengthening Agricultural Research in Eastern and Central Africa* (ASARECA), ECAPAPA began its operation in September 1997. This was about three years after ASARECA was created by the Directors of the National Agricultural Research Institutes (NARIs) in ten countries in Eastern and Central Africa.

As a programme of ASARECA, ECAPAPA's goal was envisioned as "to address the perceived need to improve agricultural policy in the region and to bring the National Agricultural Research System (NARS) into this process" so as to contribute to "expanding the economic growth of the region's agricultural sector and to alleviate poverty in the ECA countries."

The ten countries of the ECA region in which ASARECA and ECAPAPA activities are undertaken are: Burundi, the Democratic Republic of Congo, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, Sudan, Tanzania and Uganda. Although the founders of ECAPAPA (and ASARECA) are the Directors of the NARIs in those countries, ECAPAPA's scope of operation covers the entire National Agricultural Research Systems (NARS), including universities. The mission of ECAPAPA is to eventually create an inclusive agricultural policy network in the ECA region to serve as a basis for improved agricultural policy analysis and formulation.

The RT acknowledges that the mission and goal of ECAPAPA were formulated as a result of a wide consultation process with relevant stakeholders in the ECA region. ECAPAPA's stakeholders include agricultural and social research scientists, agricultural policy analysts from both the public and private sector, NGOs, academic staff from universities both within and outside the region, representatives from the private sector, International Agricultural Research Centers (IARCs), commodity-based networks and interested donors. The consultations were taken further forward through ECAPAPA's Steering Committee and Technical Advisory Pool. While such an approach has provided a sense of ECAPAPA's belonging to the region along with support from a multi-donor group, it is considered by the RT to have furnished a good base for designing relevant objectives, mandate and operation.

The consultative exercise also reveals that ECAPAPA was created out of the felt weaknesses in existing capacity in NARS for policy analysis, formulation and implementation as indicated by:

- inadequate social science capacity and poor awareness, especially within NARIs, about topical policy events that hinder their internalization in research programs;
- low interaction of agricultural policy analysis units among themselves and with stakeholders and the top-down manner in which policies are devised; and
- lack of adequate resources for policy research and analysis.

The RT has however taken into consideration the range of objectives that were considered along the process of ECAPAPA's creation and assumption of its activities. While the Committee of Directors (CD) has defined two themes: capacity building for

addressing policy issues and improvement of overall agricultural research policy, some stakeholders' perspective focused on the latter theme, emphasizing policies for agricultural technology development and transfer as well as structural transformation. Further, two strategic objectives, namely regional trade policies, and market and Natural resource management impact-assessment in NARS and networks have been defined under the goal of "increased sustainable agricultural productivity in the ECA region." In addressing this continuum of objectives, **the RT postulates the importance of formulating a clear-cut framework and process for agricultural policy research, analysis, formulation and implementation that ECAPAPA should follow.**

The RT noted the debate between NARIs demands for capacity building for addressing agricultural research policy issues on one the hand and some stakeholders' expressed desire for ECAPAPA to address more directly topical (sectoral) policy and natural resource management issues on the other hand. Associated with this debate is the very nature and structure of ECAPAPA as a programme of ASARECA *vis-a-vis* an autonomous centre of excellence for policy research and analysis for the ECA region.

ECAPAPA's Coordinating Unit (CU) consists of the Programme Coordinator, Programme Assistant, and a Secretary. The CU has devised various levels of support, the most important being ASARECA's Committee of Directors as well as ECAPAPA's Steering Committee, and the Technical Advisory Pool. Moreover, it was envisaged that national-level coordination would be put into place that would contribute to relieving some of the workload on the CU.

The trade-off between the conceived (adopted) method of stepwise (progressive) identification of policy topics for research according to their timely relevance and the need to define topics ahead for long-term implementation and fund sourcing are considered by the RT. **The RT is of the view that it is more important to define a framework and mechanism for conducting agricultural policy research, analysis, formulation and implementation, in which NARS's capacity building is an integral part, than to identify and rank in some arbitrary way policy issues that ECAPAPA should address. A clear framework would provide a mechanism for addressing current as well as future topical policy issues of importance to the ECA region.**

2.2 Activities/Projects Undertaken

Table 1 lists the activities / projects that ECAPAPA has been pursuing. The RT considers that the number of activities and deliverables by the Programme have been considerable over the past three-and-half years, taking into account the establishment period, delays encountered in funding as well in the execution of some projects. Three of the areas in which ECAPAPA has been active are capacity building, policy-related research and information exchange.

Capacity building was of two types: through participation in policy analysis projects and in short courses and workshops for policy research and analysis.

There were five projects under policy research and analysis. These sought to integrate socioeconomic analysis into technology development. One project favorably viewed by many stakeholders as providing a model for addressing other regional policy issues


Table 1. Summary of ECAPAPA's projects/activities and outputs

Consultations: <ul style="list-style-type: none"> • Stakeholders meetings • Steering Committee meetings
Capacity Building: <ul style="list-style-type: none"> • Training of trainers in proposal writing , Kenya/ Madagascar (34 participants-Sep/Oct 1998; Nov 1999) • Grants for training for stakeholders in proposal writing (5 in Arusha, April 2000 on agricultural input marketing and The Hague, July 200) • Initial policy analysis activity-financial profitability of a crop, Uganda – October 1998 • Developing skills to influence adoption of agricultural policy analysis results, Kenya -- Nov-Dec 2000 • Agricultural transformation policy workshop, Kenya--June 1999 • Impact Assessment, Uganda -- Nov 1999 • Methodology workshop on input studies -- March 2000
Policy Research and Analysis: <ul style="list-style-type: none"> • Farm-household profitability of recommended crop varieties (Kenya – beans, Tanzania- Maize/bean, Uganda-Irish potato) • Agricultural technology, economic viability & poverty alleviation (Ethiopia, Kenya, Tanzania, Uganda) – 1998-2000 • Harmonization of seed policy & regulations in East Africa – ASARECA/ECAPAPA (Kenya, Tanzania, Uganda)–6 national consultative meetings -- 1999-2000 • Agricultural input policy study -- ongoing (Kenya-Irish potato, Sudan-subsidy/credit/fertilizer & seed, Tanzania-fertilizer/policy)
Information Exchange / Dialogue: <ul style="list-style-type: none"> • Stakeholder Workshops • Steering Committee Meetings • Stakeholders Directory (annually) • Electronic Newsletter (weekly) • Periodic publications: monographs: 1) Making a difference to policies and programmes: a guide for researchers; 2) Agricultural policy process for Africa

was the seed sector harmonization activity. In this project, ECAPAPA facilitated direct dialogue amongst the specific officials responsible for seed registration, seed certification, crop breeding and foundation seed, seed multiplication and marketing, in identifying policy constraints in the seed industry in the East African Community countries (Kenya, Uganda and Tanzania), and developing a consensus on the relaxation of the constraints.

This seed harmonization exercise linked a wide variety of policy-interested groups and provided opportunities for dialogue on policy issues. The series of stakeholder meetings, the weekly electronic newsletter, periodic publications, workshops and

seminars were used in this regard. Most stakeholders' views were very positive about the relevance of these activities to their policy work.

However, the implementation of some appealing planned activities, such as the policy reviews, which could have formed a good base for “..identifying critical policy constraints and putting forth strategies to address these constraints”, have been postponed. Reference is made here to the National Agricultural policy Reviews cited in ECAPAPA's Proposed Activities and Workplan for the period August 1999 to December 2000. Also some delays in implementation have been reported that necessitated rolling over of projects to the following planning period 

2.3 Results and Impact


Given the short period of existence of ECAPAPA, it would be too early to expect significant results and impacts of its activities to-date. However, the seed harmonization project holds good promise for substantial positive impact on the seed development and trade in the region. It provides a good model for the process of bringing about dialogue among a diverse group of stakeholders with a common policy interest.

The RT also considers the process of implanting impact assessment culture into NARS and networks activities as highly relevant and beneficial. **However, the RT is of the view that greater (and more rapid) impact could be achieved with a well-defined framework within which ECAPAPA's projects could be developed and implemented.**

2.4 Some Stakeholders Views

In this section, the RT attempts to summarize some stakeholder views compiled through the field visits and email survey on some key points.

2.4.1 Awareness about ECAPAPA

The RT observed that there was a high awareness about ECAPAPA and its activities in the ECA region. While funding has not been a constraint to the programme, the limited size of the CU was of concern to some stakeholders. It is viewed by some stakeholders a significant constraint towards achieving programme objectives. This has been reflected in the slow pace of absorption of programme funds 

2.4.2 Relevance of activities undertaken

There was broad agreement about the high relevance and usefulness of the activities so far undertaken by ECAPAPA, expressed through “establishing facts on the ground”, “yielding some fruits” such as the seed harmonization policy, targeting of the activities to the stakeholders' concerns, and benefiting from training activities. Relevance was also expressed by statements such as:

ECAPAPA's activities in human capacity building for agriculture at various levels: policy, technology development and dissemination, go hand in hand with sustainable development in agriculture.

Very often I realize that ECAPAPA is dealing with issues that are just emerging, or that I find have been discussed and identified as an issue, long before, but that no-one really tackled to the point.

However, despite this broad consensus about the relevance and usefulness of the programme activities to-date, some concerns were raised by some stakeholders. They expressed the view that the program lacked a clear sense of direction: that the projects undertaken to-date appear isolated, and not at all aimed at attaining any strategic goals. Other stakeholders pointed out that more policy issues could have been addressed, more technology coverage could have been accommodated.

2.4.3 Contribution to capacity building

To some of the NARIs, it is not yet clear whether the activities are effectively contributing to their capacity strengthening in socioeconomic analysis. Some NARIs would like ECAPAPA to be more directly involved in training in socioeconomic analytical methodologies. Specific training needs were mentioned in the area of quantitative methods for policy analysis, such as cost-benefit analysis. Although, on account of the dwindling funding for M.Sc. and Ph.D. programs, higher degree training in agricultural policy was among the expressed needs of some NARS, the RT considers that this is currently beyond the scope of ECAPAPA.

An issue of general nature that is worth mentioning is the benefits of maximum utilization of existing policy analysis expertise in the region for capacity building. It was also suggested by some stakeholders that some of the training activities, such as research-proposal writing, might better be conducted at national levels in order to widen the scope of participation. This would however require considering the cost trade-off between regional and national training activities and the benefits accruing thereof. Further, training has been viewed within its link to research activities and related analysis techniques, but some thoughts advocate augmentation of such a mechanism with supported networking to build capacity, especially among young scientists.

Often times, capacity building efforts have been constrained by the low human resources availability for socioeconomic or policy analysis activities in most NARS – a fact that has been well recognized by ECAPAPA and ASARECA. Over time, considerable skills of those institutions have been drained into more financially rewarding ones, but mostly remain within the ECA region. Also, there are often big gaps due to slack intake periods of renewal of the research cadre leaving aging researchers on the one hand and young inexperienced ones on the other hand.



Evidence from a regional study on institutional capacity reveals both limited and declining numbers of economists and social scientists (*David Norman 1998, Institutional Capacity with Reference to Applied Microeconomics in Eastern and Southern Africa – Survey executed at request of the Rockefeller Foundation, July-October 1998*). Extract from the study, which covered five countries: Kenya, Malawi, Tanzania, Uganda and Zimbabwe shows total and average staffing in economic and agricultural economics departments at the universities of those countries in 1998 as in Table 2:


Table 2 Total staffing of economists and agricultural economists at universities in five countries in Eastern and Southern Africa, 1998

Level of Training	Economics Departments	Agricultural Economics
With Ph.D.	44	37
Without Ph.D.	76	58
Average/Department:		
With Ph.D.	6	6
Without Ph.D.	11	8

While the Table reflects the limited human resources in the designated disciplines, information in the study depict low percentages of staff with Ph.Ds. in both department categories (37% and 39%) as compared with other departments. Further, deterioration in enrollment in postgraduate (M.Sc./M.Phil.) students in agricultural economics has been demonstrated by the study as a steady decline in numbers from 69 in 1993 to 30 in 1997, only rising in 1998 to 45.

On the other hand, capacities of economists and social scientists in NARIs are quite limited, averaging 3.9% of total scientists in 1993 in the SADC region (*Heisey, P.W. and D.D. Rohrbach, 1993, Economists and economic research in the NARSs of SADC: Results of a reconnaissance survey; Lilongwe and Bulawayo: CIMMYT and ICRISAT – Draft*).

Information available to the RT for the current year shows similar low levels of highly qualified staff. Ph.D. holders at agricultural economics departments at Makerere, Nairobi  Sokoine universities were about 6, 11 and 12, respectively. It has also been reported that postgraduate intake in these departments has been steadily decreasing due to funding constraints, leading to demand way outstripping supply of entrants into the job market. The number of socio-economists in NARIs in Uganda and Tanzania (7 and 10, respectively) constitute merely 3.5% and 2.9%, respectively, of their total research scientists. Kenya's KARI has exceptionally good capacity comprising 65 socio-economists, representing 13% of its total research staff, but many of these are in fact on leave of absence or secondment to private or international research institutions in the country .

Nevertheless, some NARIs, socioeconomic departments of universities, policy research institutes and other organizations have considerable capabilities that put them in a favorable competitive position for policy analysis , while capacity building is crucial, the available cumulative trained manpower would take policy research to a considerable extent; a situation that ECAPAPA would benefit from. On the other hand, NARS are at different levels of capacity endowments, implying differential capacity building requirements with more urgent input directed to weaker ones.

2.4.4 Stakeholder concerns about policy issues


A wide range of research areas and topics was suggested by the stakeholders. Screening and classifying these under major themes, the following listing depicts the range of research areas that stakeholders think ECAPAPA should address. However, the RT considers the range of issues as a “wish list” by the different stakeholders.

Food security issues

- Land tenure/land reform

- Food security research (national and household)
- Poverty, liberalization, safety nets
- Product preservation in rural areas
- Food aid and its impact
- Needs assessment

Natural resource management and use

- Resource management – rationalization of agricultural activities
- Environmental impacts of policy choices: efficiency, sustainability and equity
- Irrigation/drought – response to shocks 
- Utilization and management of shared resources, e.g. Lake Victoria

Emerging new areas

- Biotechnology access and application
- Organic production, creating common brands – common voice for the region
- Awareness about impact of genetically modified products
- Biodiversity, genetic resource policies, proprietary rights
- National/regional AKIS policies
- AIDS impact on the agricultural sector

Agricultural trade, regional integration and markets

- Globalization, WTO
- Regional cooperation and integration: custom union, restriction to trade, rules of origin, free-trade area – integration into
- Market development - regional markets, regional market information, trade restrictions, transaction costs, commodity competitiveness, input markets, etc.
- Extension of the model of the seed harmonization to other areas such as common standards for major crops, labor standards, agrochemicals , taxation on genetic material
- Modernization of agriculture/Agricultural transformation
- Infrastructure – transaction costs leading to high input costs in the hinterlands, infrastructure affecting agriculture (roads, education, health, water)
- Internal markets – linking producers to markets
- Rural financial markets
- Winners and losers in agricultural market liberalization

Private sector issues

- Research in the private sector – role and capacity of private sector in delivery of services, mobilizing private sector resources for investments in research, commercial capacity development of the private sector
- Implementation/adoption of privatization
- Regional trade facilitation

While the RT notes that ECAPAPA's past and current project activities address some of the above issues, it is the view of the team that a clear framework and mechanism is required to identify which issues offer the greatest opportunities for impacting agricultural development and growth in the ECA region. In the following chapter, the RT offers such a framework and mechanism.

2.4.5 Data Needs and Availability

There was a common view among stakeholders emphasizing the poor status of data availability in most institutions that would be beneficial for analyses of technology transfer, adoption and impact. Data provided by statistical bureaus are rated as unreliable. Some institutions collect farm data but their time-series use potential is questionable. This raises the need to initiate collection of farm-level data associated with specific commodities and/or farming systems that could be used for long-term analyses. Some plausible stakeholders' views emphasize the need to link data collection activity to other institutions with experience in this area.

An interesting remark made by a private firm was that the private sector could be beneficial in supplying more reliable data from outside (the region) sources than do public research institutions. This calls for cooperation between the public and private sector in macro-level data sourcing and management.


2.4.6 Research grants

Most of the stakeholders expressed support for competitive grants, but many raised concerns about the procedures, topic selection and size of the grant. It has been argued that a lengthy procedure for grant approval is discouraging for private consultants, especially when such grants are relatively small (less than US\$ 30,000). Most of the NARS are for open-ended topic specification in the sense that ECAPAPA would define the frame and give room for researchers to identify specific topics that are of national or regional importance. Equally important is to provide room for emerging policy issues that need to be researched and provide more allowance for demand-driven policy research. University researchers identified two levels of grants in terms of amount. The first could be small grants of the level currently provided by ECAPAPA to be used for post-graduate studies while for staff research preference is for larger grants that allow wider participation. Some staff from universities have access to larger research grants from other donors, and so would like the size of ECAPAPA grants to be of competitive levels. It has however been understood that available capacities are different among different institutions, a situation that would be taken into account when designing research grants. Attention has also been drawn to the need for “..monitoring and even mentoring in some cases..” of research grants “..so as to safeguard quality of the results”.


Valuable recommendations on the formulation of research grants have been made to reflect objectives such as: “..finding the low-cost bidder for a standard (but useful) piece of research; search for innovative ideas that are unlikely to be funded in regular ways; encourage wider partnership (built into the eligibility criteria); and encourage scientists to take on projects with higher risks of failure”.

Beside competitive grants, the RT is also recommending commissioned studies where appropriate. These would require higher input from ECAPAPA's CU and would relate to policy research topics that ECAPAPA would like to be implemented, most likely within a regional context, but for which sufficient expertise in NARS, especially NARIS, does not exist.

Views have also been expressed about the issue of programme funding, especially with regard to apparent conflict in donor interests about the content of the


programme's workplan, and the long-term sustainability of such funding. To address this issue, suggestions included more diversification of donors, sensitizing policy makers in the region to contribute to funding through pursuing policy-driven and impact-generating policy research, engaging the private sector in research activities that are of direct benefit to them, and pursuing a policy of resistance to donor influence of programme activities.  was also proposed that long-term donor funding be channeled to capacity building. **The RT views these suggestions as useful in offering options to ECAPAPA and ASARECA to improve on its funding policies.**


2.4.7 Policy Dialogue

The importance of dialogue between policy analysts (and researchers in general) and policy makers is widely acknowledged among stakeholders where the need for training in this area has been expressed by some of them to meet the challenge. The means proposed for sensitizing high policy debate include organizing discussion luncheons or dinners for high-level policy makers, gathering parliamentary groups related to agriculture, open-ended seminars for interested policy people to know about research results, preparation of concise policy briefs, abstracts, summaries in newspapers, journal publications. Some of the views expressed regard that efficient means of communicating with policy makers is through high-level ex-government officials.  **The RT considers the area of policy dialogue as of paramount importance in which ECAPAPA should employ the most efficient means supported by training efforts.**


2.4.8 ECAPAPA Coordination

There has been a convergence of opinions towards keeping ECAPAPA as "lean and efficient". There was also substantial emphasis that ECAPAPA remains as an arm of ASARECA. Strong views were however made that ECAPAPA need to develop a well-defined focus with foreseeable deliverables and impact. **Networking is viewed by the RT as a possible useful means of supporting ECAPAPA, building capacity, sharing experience and enhancing knowledge.**

There was, however, also high consensus that the current human resources at the CU are too low to support the required activities given the high requirements for coordination and technical support especially with the expected expansion of the activities of the Programme. The need for "beefing-up" the Unit is well justified.  Besides, for more efficient operation, the issue of engaging coordinators at the National level in coordinating in-country (or regional) activities that is already under consideration by ECAPAPA is gaining support.

Many coordination and research-related issues were raised. The most important being the likelihood that representatives of NARS in the Steering Committee are inclined to pursue their own national interests, thus influencing the agenda and jeopardizing the regional dimension of the programme. However, no evidence of such a tendency has been revealed through the discussions with many stakeholders. There was also the concern about ASARECA Executive Secretariat's influence in the SC leading to the weakening of its dialogue capacity on the research programme.  this however will need to be viewed within the concept of ASARECA as the key stakeholder of ECAPAPA. **The RT is of the view that both ASARECA and ECAPAPA will need to draw out a clear definition of the authority and functions of the SC.**

Despite the limitation in capacity in the region for policy research, many NARS, especially universities, have expressed their availability and willingness to offer their expertise for cooperation with ECAPAPA. While this will offer great enhancement to ECAPAPA's efficiency in coordination in terms of dealing with technical issues (peer review of proposals, terms of reference for commissioned studies, etc.), suggestions emerged for providing remuneration to the Technical Advisory Experts for more efficient utilization of their expertise in technical matters.

Some complaints were raised about delayed funding to start approved projects. Coupled with the delays that are experienced on the side of NARS to meet stated deadlines, such a situation would result in much delayed delivery that the RT views in terms of the need for timely response and continuous follow-up by the CU. It has also been expressed that ECAPAPA should comply with standard accounting policies, regulations and procedures of recipient institutions such as payment of institutional fees and acceptance of standard rates for transport cost 

The views of stakeholders in this chapter were seriously considered by the RT in developing a framework and mechanism for ECAPAPA for addressing the agricultural policy change process for the ECA region in the next chapter.

3. ECAPAPA's Future

3.1 A Vision for ECAPAPA's Future

Based on our consultations with stakeholders and assessment of ECAPAPA's first three years, we project that over the next five to ten years ECAPAPA could be a powerful catalyst for agricultural transformation in the ECA region.

The RT's view is that ECAPAPA can accelerate the pace and raise the value of technological and institutional (policy) change by functioning as a functional programme, overcoming historical barriers across countries and institutions. In so doing ECAPAPA can help mobilize and direct the resources needed for biophysical researchers to deliver appropriate new techniques, and for policymakers to seize the opportunities offered by biophysical innovation. **We believe that ECAPAPA can fulfill that mission within the parameters of its current organizational structure, through strategic investments in competitive grants, and commissioned studies (requiring highly specialized expertise hard to find in NARIS or NARS), as detailed in the framework specified in Section 3.3 below.**

Accordingly, we believe that an appropriate "vision statement" for ECAPAPA might be as follows:

ECAPAPA aims to be a major catalyst for agricultural transformation in the ECA region, harnessing science and technology to promote economic growth, poverty alleviation and environmental sustainability.

A more detailed "mission statement" that identifies the programme's guiding principles might be as follows:

ECAPAPA operates by helping researchers and policy-makers work together to meet each country's as well as regional needs. ECAPAPA's interventions bridge national and institutional barriers, providing support for collaborative efforts to produce new data and analyses, inform policy dialogue and implement policy actions. In this way ECAPAPA helps strengthen the linkage between technological change and policy needs, mobilizing resources for technological and institutional innovation within and across countries.

Our focus on the process of agricultural innovation and the role of ECAPAPA is based on the following observations:

- (a) globalization, market liberalization and regional integration are providing challenges and opportunities to stakeholders in the agricultural sector in the ECA region;
- (b) technological and institutional change is a fundamental engine of economic growth and poverty alleviation, determining the production possibilities through which farms and firms can respond to market conditions;
- (c) the private sector's response to reform is limited by the availability of appropriate new techniques and policies from the pre-reform "shelf" of technologies and market structures; and

(d) public-sector investments that generate institutional change and a sustained flow of appropriate new techniques are therefore needed for sustained economic growth and poverty alleviation; but

(e) individual countries and institutions do not have adequate technical capacity nor financial resources to undertake a sufficient level of appropriate R&D or organizational change, so collaboration across countries and across institutions is needed.

3.2 ECAPAPA's Comparative Advantage

We see ECAPAPA itself as a key institutional innovation in the region's policy-change process because of its unique ability to mobilize and direct resources across national and institutional boundaries. ECAPAPA is not tied to any one funding source or kind of expenditure, and its own institutional structure is minimal. This permits ECAPAPA to play a unique role in facilitating exchange between researchers and policymakers, reducing the transaction costs between them in ways that strengthen research systems and improves policy outcomes.

In reaching out from NARIs (represented by ASARECA's Committee of Directors) to other policy actors (represented by private policy institutes), we see ECAPAPA as being a kind of "open" network, similar to the internet or a road system, whose defining feature is not the list of participants or the issues at hand, but rather the speed and accuracy with which resources are directed at solving high-priority problems. Most of ASARECA's other activities are "closed" networks, in that the participants and issues are known ahead of time. In contrast, ECAPAPA is aimed at facilitating interactions among people who may not yet know each other, and offer fresh incentives for researchers and policymakers to meet local needs.

To visualize how ECAPAPA's unique structure can offer fresh incentives to accelerate change in the region, the following two tables represent the process by which ECAPAPA can (and does) create projects that cut across national and institutional boundaries, mobilizing resources and directing them towards new, high-impact interventions. The first table illustrates ECAPAPA's ability to mobilize resources to achieve critical mass or scale economies in each type of project, while the second illustrates how those projects meet the needs of individual countries and institutions.

Table 3.1 shows how the ECAPAPA Coordinating Unit can link a set of projects to the appropriate donors. (We use the term "donor" to mean any source of funding; at present, ECAPAPA's funding comes from institutions outside Africa, but eventually some African institutions may also be able to contribute.) In the hypothetical example shown, project 1 is of interest to donors A and C, while project 2 is of interest to donors B, C and D, and so forth. Through ECAPAPA, each project can have one or more donors, and each donor can support one or more projects. In this way economies of scale can be achieved on the resource-mobilization side, as ECAPAPA offers a way for donors to reduce their transaction costs in achieving a variety of region-wide objectives.

Table 3.1. ECAPAPA's role in policy analysis: mobilizing resources

	Donor A	Donor B	Donor C	Donor D
Project 1	X		X	
Project 2		X	X	X
Project 3		X		X
Project 4			X	

Table 3.2 shows how the ECAPAPA Coordinating Unit can link the projects to appropriate countries and types of institutions, to achieve high impact in a cost-effective manner. In the example, an institution of type H in country W might undertake projects 1, 2 and 3, while similar institutions in other countries conduct a slightly different mix of projects. Type H institutions might be NARIs, which exist in all countries and might all be involved in project 1. But in country Z, for example, the NARI might undertake a range of other projects as well, perhaps because in that country institutions of type I and K might not exist or might not be interested. In this way economies of scale and scope can be achieved on the resource-expenditure side, by forging new collaborative linkages across countries and across institutions.

Table 3.2. ECAPAPA's role in policy analysis: directing resources

	Country W	Country X	Country Y	Country Z
Instit. type H	Projects 1, 2, 3	Projects 1, 4	Project 1	Projects 1,2,3 4
Instit. type I	Projects 1, 4	Project 3	Projects 1, 4	
Instit. type J	Project 2	Projects 1, 3	Projects 2, 3	Projects 1, 4
Instit. type K	Project 4	Projects 1, 4		

In our vision, ECAPAPA's role is to serve as an entrepreneurial creator of projects that exploit the competitive advantages of other institutions in delivering the policy-analysis needs of each country, reducing transaction costs to mobilize the necessary resources as quickly and effectively as possible. Much of ECAPAPA's allocation of resources across institutions and countries can occur through competitive grants, in which case competitive advantage is revealed by the quality of proposals. But for some projects, competitive advantage is well-known, so ECAPAPA can allocate resources directly based on that information. For example, a project involving technology impact assessment will almost inevitably require some NARI resources, to provide data from technology trials.

3.3 A Novel Framework for ECAPAPA's Activities

Our view of ECAPAPA's role is derived from a single unifying concept: the ECA region demands more technological and institutional (policy) innovations, to meet its evolving socioeconomic needs. Many different kinds of innovations are needed, from new crop varieties and livestock breeds to new marketing arrangements and information, new ways of managing natural resources and new policies.

Based on our stakeholder interviews and assessment of ECAPAPA's activities, we believe that ECAPAPA's priority should be to ensure that its interventions facilitate the innovation process. **For most issues, instead of asking ECAPAPA itself to prejudge which topics should be targeted, we believe that ECAPAPA should focus on facilitating the creation of the evidence (data), analysis, dialogue and**

actions needed for researchers and policymakers in each country to respond more effectively to local as well as regional needs. Our view, and ECAPAPA's experience, is that "regional policy is national policy" – policies will change only when national policymakers see it as in their interests to do so. ECAPAPA's task is to ensure that the necessary evidence, analysis, dialogue and actions are in place for policy change to occur.

We believe that, in general, priority-setting among topical issues such as trade facilitation, gender equity, input markets, soil degradation, and so forth can best be done in terms of specific choices within specific activities. The overarching vision that defines ECAPAPA should be the application of socioeconomic analysis to motivate and guide innovation towards increased productivity, equity and stability in the ECA region. In the words of the proposed vision statement, the idea is for ECAPAPA to be *harnessing science and technology to promote economic growth, poverty alleviation and environmental sustainability*. Many different topical issues are involved in fulfilling that vision, and the relative priorities that should be attached to each issue depend on where, when and with whom an activity is being undertaken.

The RT believes that ECAPAPA needs to define itself more precisely, with a clearer conceptual framework to guide its workplan. The framework must be flexible, collaborative and participatory to meet the needs of ECAPAPA's many stakeholders, but it must also be sufficiently specific to provide operational guidelines for ECAPAPA's activities. Most importantly, the framework and associated workplan should meet both of ECAPAPA's core objectives: building capacity for agricultural research and policy analysis in the long run, as well as achieving policy change through analysis, dialogue and action in the short run. We see no necessary contradiction between these two objectives; indeed they are mutually-reinforcing in the framework we propose.

The proposed framework divides the process of policy change into four stages: policy *data*, policy *analysis*, policy *dialogue* and policy *action* (Figure 1 and 2). Using this framework leads to specific suggestions for the kinds of intervention by ECAPAPA that are most needed to facilitate the whole policy-change process, with capacity-building as an inherent feature of those interventions, and with each intervention addressing the topical issues to which it is most suited. In this way we come to clear priorities for action, identifying the issues in which ECAPAPA can best achieve rapid, durable results.

The proposed stages are inspired by and build on ECAPAPA's current activities, and can be characterized as follows:

- (a) a *data stage*, in which ECAPAPA's interventions support collaboratively designed and implemented efforts to collect or collate and disseminate new or existing evidence on key agricultural technologies and policy issues across countries;
- (b) an *analysis stage*; in which ECAPAPA helps stakeholders provide information on the effects of alternative kinds of public investments and policy choices;
- (c) a *dialogue stage*, in which ECAPAPA's activities ensure that the new data and analyses (i.e. the information generated) enter into policy debates and influence policy-making; and

- (d) an *action stage*, in which ECAPAPA intervenes to bring together the main actors who create and implement policies to facilitate implementation of the outcomes of policy dialogue.

The four stages in the framework are mutually-reinforcing: as more and better data is drawn into more and better analyses, which in turn fuels more effective policy dialogue and hence more appropriate policy actions, which could stimulate further research data and analysis. Different issues could enter the framework at different stages, depending upon whether data and analysis, dialogue or policy action is required. For instance, the main issue currently ripe for the action stage is the regional seed policy; the main issue at the data stage would be technology impact assessment; the main issues at the analysis stage might be regional competitiveness and the evolution of farming systems, and the main issue at the dialogue stage is how to make research more responsive to policy needs.

In Figure 1, ECAPAPA's activities are seen as interventions targeting four stages in a continuous cycle of capacity building and policy change. Figure 2 shows how these interventions create impact in ECA agriculture. The interventions at each stage of policy-making lead to more effective public-sector policies, resulting in faster adoption of more effective technologies and institutions in the private sector.

The four stages of the policy-making process call for distinct kinds of interventions, providing clear guidelines for ECAPAPA's activities. Those interventions then apply to many different policy issues, either current, or emerging in the future. Instead of dictating which policy research activities are to be addressed, the proposed framework creates collaborative and participatory linkages among ECAPAPA's stakeholders, allowing each participating institution to make progress on the research activity under any ECAPAPA-identified policy issue in which it has a comparative advantage. In this way ECAPAPA's interventions can achieve rapid results in a cost-effective, sustainable manner, building long-term capacity and obtaining short-term impact at the same time.

3.4 Key Policy Research Issues for ECAPAPA

The RT was asked by the TOR to identify an agenda for ECAPAPA that can help to inform ongoing efforts to influence and shape policy in the ECA region, while providing policy feedbacks into policy research and analysis. In attempting this enormous and challenging task, the RT is guided by the various policy initiatives and processes underway by ECAPAPA, the views obtained through the Team's selected country visits and email questionnaire, the Team's experiences and the framework outlined above.

Figure 1.
Proposed ECAPAPA Framework
to Guide Capacity Building for Policy Change

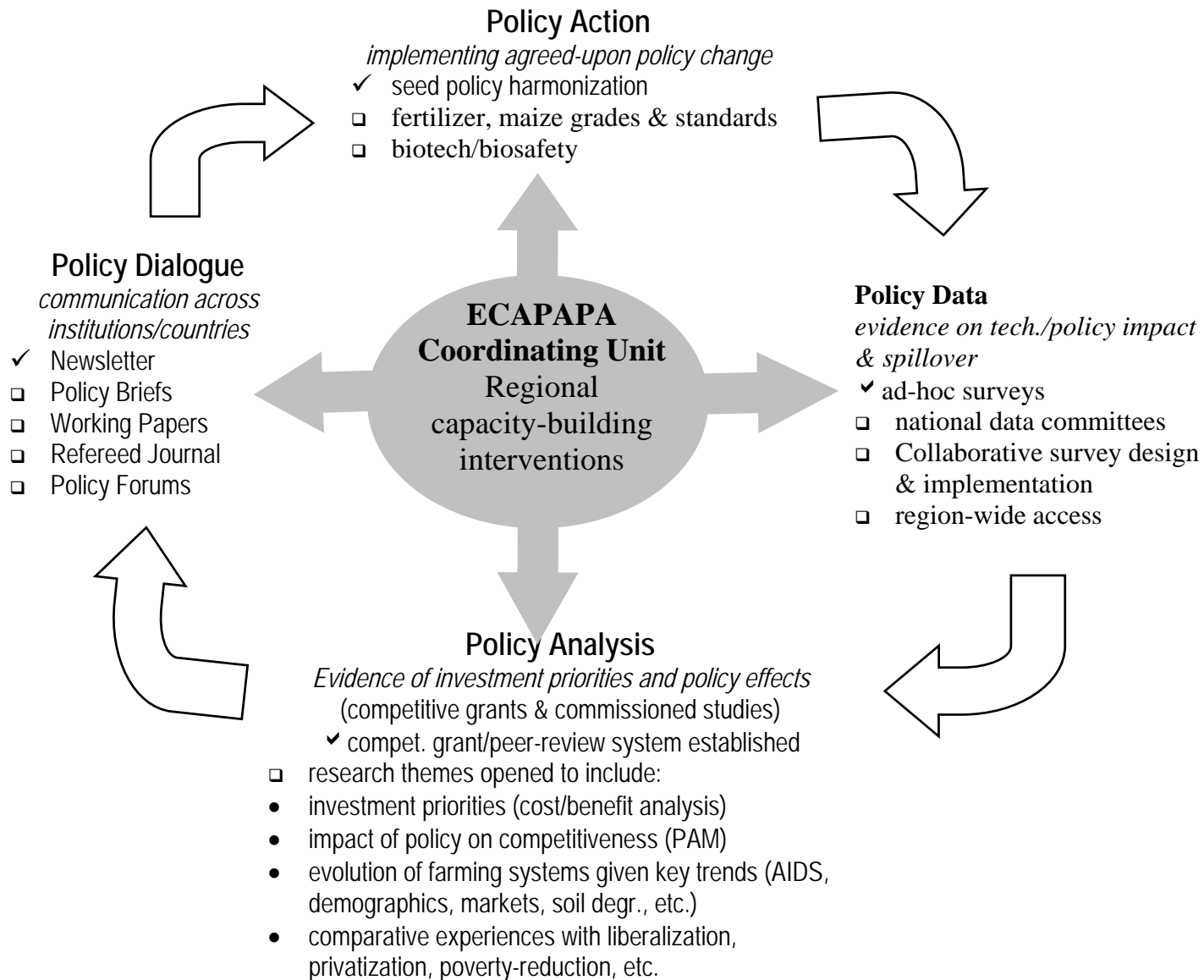
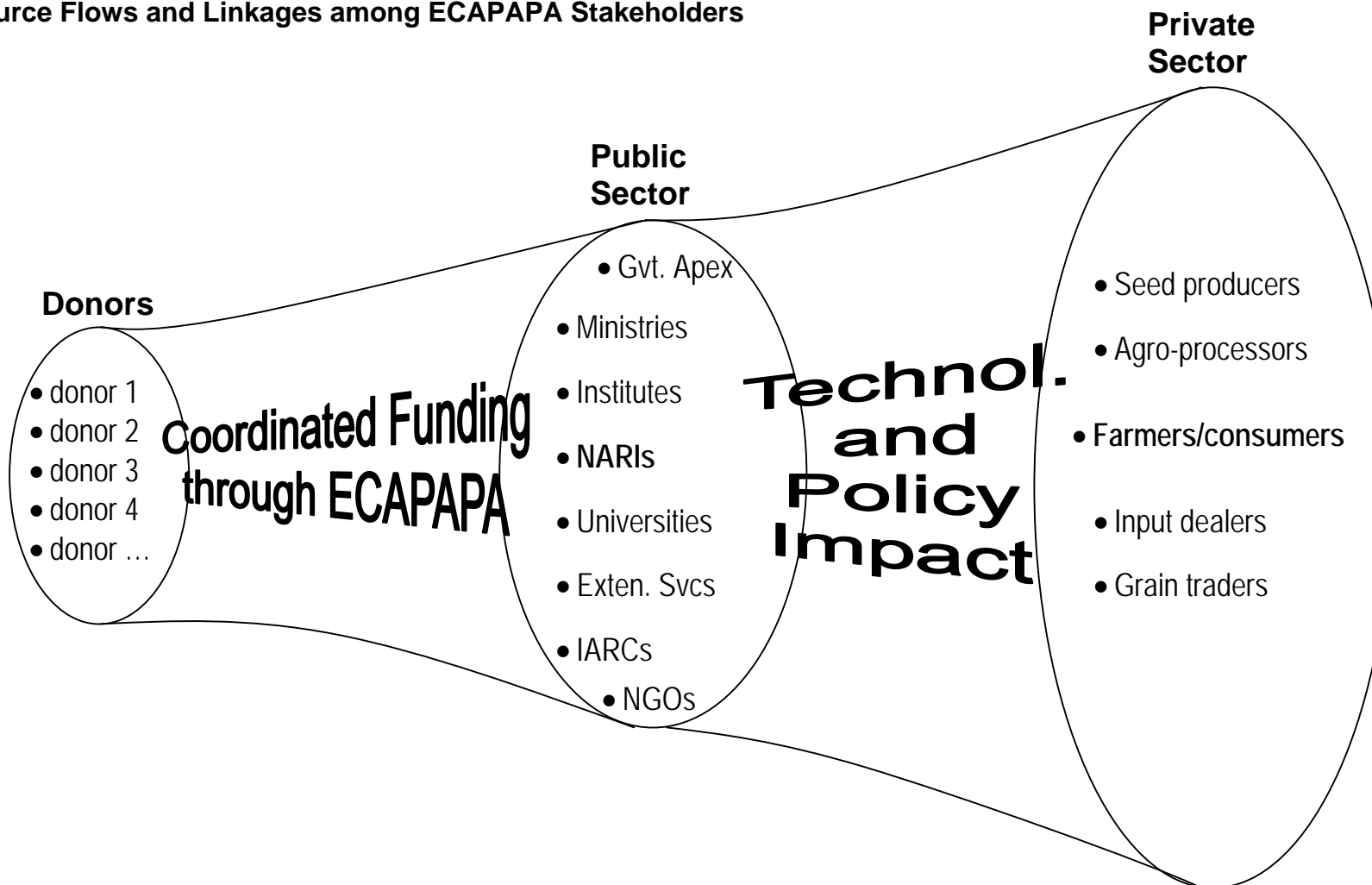


Figure 2.
Resource Flows and Linkages among ECAPAPA Stakeholders



Starting from the point of “picking the low fruit first” we outline issues according to the following order of the framework stages: policy dialogue, policy action, policy analysis and policy data. In practice, we see ECAPAPA continuing or initiating projects or activities in all the four stages simultaneously.


In Figure 1 we show how each of ECAPAPA’s current activities fit into the proposed framework, and provide brief examples of proposed other activities at each stage of the policy cycle. Using this framework, the RT proposes the following agenda for over the next 5 to 10 years.

3.4.1 Policy dialogue: strengthening linkages between analysis and action

ECAPAPA uses various means, both electronic and hard-copy, to exchange policy related information in the region. Many stakeholders expressed satisfaction with the information received. However, some expressed concern at the mismatch between policy analysis and policy-making, and asked whether ECAPAPA could help improve the quality and relevance of analytical work. Others suggested that there should be more content on regional policy issues in the weekly newsletter, “we want to know what is going on in the countries of the region in matters of policy” one stakeholder said.

This is an area (framework stage) at which ECAPAPA could begin to improve for immediate impact (*picking the low fruit*). Accordingly, to help guide analyses towards policy needs, the RT proposes an inter-related set of activities that together can create a more effective marketplace for ideas, through which policy goals are translated into incentives for higher-quality, more relevant research. The proposed set of activities consists of:

3.4.1.1 Improving ECAPAPA’s weekly newsletter

This can be accomplished by including abstracts of more research papers, with a link to the full text posted on a website or the email address of a source from which copies can be requested. We propose that local researchers be encouraged to submit appropriate abstracts by including a by-line, saying “Abstract submitted by XX of YY institution in ZZ country.” Researchers could submit abstracts of their own papers, or of papers in areas they think are particularly important. The principal purpose is for newsletter readers to know which researchers are working on which topics in the region, and who to contact for more information. As a separate matter, we propose that the ECAPAPA newsletter switch from its current format, as an RTF file, to text-only in the body of the email. Receiving the newsletter in a text-only email is faster and easier for those with limited dial-up access to the internet, and provides direct click-through access to websites with further details for those with better access to the internet. It is the view of the RT that the frequency of the newsletter could be reduced to bi-weekly or even to monthly without reducing its impact on policy dialogue .


3.4.1.2 Funding the creation and dissemination of short (1 to 4 page) “Policy Memos”

These would be numbered, and based on longer research papers, to be distributed in print and through email. A model for this is the USAID/AFR-SD Policy Briefs. Authors should be paid a small honorarium for their work if writing an ECAPAPA Policy Memo is not already a condition of a research contract.

3.4.1.3 Funding the establishment of an ECAPAPA “Working Paper” series

The series would be numbered and archived at ECAPAPA and available for distribution on request by mail or electronically, through e-mail and on computer compact discs. Currently, the research papers prepared for consultancies and presented at conferences are printed and disseminated on a once-off basis, and are difficult to locate afterwards. The working papers would give researchers a stronger incentive to document the data and methods behind their work, by archiving them and ensuring that future analysts can access them. A model for this is the Working Paper series maintained by the Department of Agricultural Economics and Extension at the University of Zimbabwe.

3.4.1.4 Funding the revival of the East African Journal of Rural Development

This was the journal of the East African Association of Agricultural Economists, which “died”, like many other regional initiatives then, along with the former East African Community. The new journal should be renamed the *Eastern and Central Africa Journal of Rural Development (or Agricultural Economics)* to extend its regional and thematic coverage. Doing so would provide researchers a strong incentive to produce high-quality research. Currently the Rockefeller Foundation is considering supporting this initiative, through the regional agricultural economics association.³ The purpose of a journal of this sort is not so much to disseminate new work, but to provide a permanent archive of the work that peer-reviewers consider to be the most relevant and important contributions. Through peer-review, researchers are induced to document their data and methods as completely and concisely as possible, and to find the most significant policy implications that are robustly supported by the evidence at hand. Because publishing in peer-reviewed journals is fundamental to the process of scientific advancement, most of the labor costs of publication are borne by the editors, authors and peer-reviewers as a part of their ordinary research work. ECAPAPA or other outside donors would need only fund the costs of printing, net of other expected revenue such as subscription fees. To keep costs low, the journal could be published on CD (with the table of contents printed on the cover) as well as a limited number of printed copies for libraries and others willing to pay a premium for the printed version 

3.4.1.5 Funding annual Policy Forums

At these forums, a variety of researchers working on ECAPAPA related policy issues would be invited to present their results to policy-makers. Currently many such events are built into the budgets of donor-funded research efforts, contributing to the cacophony of voices attempting to influence policy on an ad-hoc basis. The ECAPAPA Forums would be distinctive in that they could capture economies of scale and scope by offering a platform to researchers from multiple institutions. The Forums would be a key element of the proposed “market for ideas”, in that it would give researchers from each institution a strong incentive to

³ The proposed journal should merge with or replace the intermittently-published *Journal of Agricultural Economics and Development*, edited by Dr. A.K. Kashuliza at Sokoine University. The proposed journal would complement the regional journals that cover related fields notably the *East African Journal of Economics* (for macroeconomic and urban issues), the *Eastern Africa Social Science Review* (for sociology, anthropology etc.), and the journal of the East African Crop Science Association.

be well prepared and persuasive, since their presentations would be in direct competition with each other for the audience's attention. What we have in mind are one-day events, aimed at an audience of 50 to 100 policy people (that is, journalists, parliamentarians, civil servants, NGO officials and members of the donor community). ECAPAPA would convene a Program Committee for each country's Forum, which would solicit presentations, advise presenters and control the Forum's budget.

The impact of these policy-dialogue initiatives will be felt through much closer alignment of research activity with policy needs, by reducing transaction costs amongst researchers and between researchers and policy-makers, thus improving incentives for researchers to do high-quality, relevant work. The key instruments through which ECAPAPA could facilitate communication and improve research incentives across the region is through:

- (1) Policy Memos in a numbered, archived and widely-disseminated series, each 1, 2 or 4 pages in length, designed to be read by policy-makers;
- (2) Working Papers in a numbered, archived and easily-accessed series, designed to document the data and methods used in writing Policy Memos or other analyses;
- (3) A regional peer-reviewed journal, designed to increase researchers' incentives to do high-quality work that earns the attention and respect of others;
- (4) Annual Policy Forum events, designed to showcase recent studies for policymakers, parliamentarians, journalists, and donor or NGO representatives; and
- (5) Abstracts of studies distributed through the ECAPAPA email newsletter.

The key intermediate result from the policy-dialogue initiative is the greater availability and use of higher-quality policy analysis, by policy-makers across the region. We could specify quantitative targets in terms of the number of Policy Memos and Working Papers produced and then requested by others, as well as the number of requests for the journal and press articles or other coverage of the Policy Forums.

3.4.2 Policy action: strengthening implementation of desired policy changes

Where there is widespread agreement on the direction of policy changes, implementation may require direct negotiations amongst policy actors. The following are activities and projects, which could be undertaken at this stage by ECAPAPA.

3.4.2.1 The seed harmonization project

This is the continuation of the ongoing ASARECA/ECAPAPA project on the harmonization of seed policies and regulations in East Africa. This project has demonstrated that new policies could be developed through direct dialogue amongst the specific officials responsible for seed registration, seed certification, crop breeding and foundation seed, and seed multiplication and marketing, as well as those responsible for trade restrictions at national borders and others. Each of these actors could block implementation, if they were not closely integrated into the policy-change process from the start. ECAPAPA is uniquely placed to convene such policy-harmonization working groups, to facilitate their negotiations and finance their activities. This project should be extended to the wider ECA region, using lessons learned from the East African experience.

3.4.2.2 Rationalization and harmonization of trade policies, regulations and procedures

The seed harmonization model should be applied to this project, targeted at the major commodities of trade in the ECA region, including fertilizers, other important agrochemicals, cereal grains and pulses. Activities would include standardization and certification of commodity grades and facilitation of cross-border trade through removal of tariff and non-tariff barriers. Other likely targets for policy-harmonization action over the next five to ten years include measures to improve the way in which ECA exports meet importer regulations (e.g. EU limits on pesticide residues) or consumer preferences (e.g. certification of sesame seed, gum Arabic or coffee as “organic”, or produced without child labor, or marketed through “fair trade” arrangements), as well as ways to obtain regional economies of scale in bio-safety (e.g. testing of virus-resistant potatoes and Bt cotton and maize), and ways to accelerate the passage of goods through regional ports, railways and roads.

The most important intermediate results from policy harmonization are changes in institutional practices, which often unwritten rules such as those governing central oversight of customs officials, or the scheduling of railcars and cargo services. In some cases, intermediate results will include legislative or administrative mandates as well.

3.4.3 Policy analysis: strengthening knowledge to inform for policy choices

The RT’s stakeholder interviews revealed very large gaps in local policy-makers’ and policy analysts’ knowledge of the comparative performance of alternative public investment options or policy changes. Some of the key such policy questions for project development are:

3.4.3.1 Investment levels

What are the relative costs and benefits of specific kinds of public investments, given the prevailing conditions in the ECA region? In which areas of government activity (technology R&D, extension/advisory services, education/ health services, transport infrastructure, etc.) would increased investment have the greatest impact on key policy goals such as economic growth, poverty alleviation and environmental sustainability? Studies in this area should examine data across countries in and outside the ECA region, taking account of differences and similarities among countries, to draw conclusions for particular ECA countries and investment activities. Of particular interest would be studies that look at investments with regional spillover effects, such as the impact of Kenyan investment in crop breeding on Ugandan crop productivity, the impact on regional trade of improving the seaport performance at Mombasa, Dar-es-Salaam, Port Sudan or Muswa, or that of improving transport to hinterland and land-locked countries.

3.4.3.2 Institutional arrangements.

Within agriculture, what changes in institutional structure are likely to have high payoffs in the ECA region? For tea and coffee, for example, how do cross-country differences in market structure affect farmers’ and traders’ incentives, and market performance? For agricultural research systems, what kinds of intellectual property rights and governance systems for biotechnology and biosafety are likely to be most appropriate in the ECA region? For shared regional resources, such as Lake Victoria and the White Nile system, what are the most cost-effective ways to manage common problems such as pesticide contamination of fish or water-hyacinth growth?

3.4.3.3 Response to external change

How should public and private institutions in the ECA respond to the next round of trade negotiations under WTO? How should they respond to the Africa Growth and Opportunity Act in the United States, or changes in the Lome Convention with Europe, or changes in world markets associated with new transport and information technologies?

3.4.3.4 Response to internal change. How should public and private institutions in the ECA region respond to the new public-health realities -- HIV/AIDS and also recent increases in malaria and other vector-borne diseases? How should they respond to increasing regional integration through COMESA and the East African Community?

3.4.3.5 Natural resource management and use

What tenure systems would lead to sustainable use of land and water resources? What are effective ways of response to drought shocks?

On these and other issues, we propose that ECAPAPA call for “mixed teams” of researchers to apply for competitive grants, or conduct commissioned studies where desirable.

In contrast with ECAPAPA’s earlier competitive and commissioned studies, we propose that research topics be much less narrowly prescribed than before. ECAPAPA’s call for proposals should specify the broad issues, objectives and modalities of the grant, and ask that researchers specify the question they propose to answer and the data and methods with which they propose to answer it. We suggest that questions such as those listed under issues 3.4.3.1-5 above should be listed in the request for proposals, to stimulate researchers’ thinking and elicit new ideas.

A broader RFP, of course, would bring in more proposals. The goal is to find those, which offer the most promising approaches, usually by contributing new kinds of evidence to important policy debates. By definition, research consists of finding what was previously unknown. In casting a wider net, ECAPAPA is more likely to catch newer, more valuable fish – with the key challenge being to choose among the larger number of proposals.

To facilitate project selection, we propose that ECAPAPA adopt a two-step review process. The call for proposals should ask for a two-page “pre-proposal” that specifies the names and contact details of the proposed researchers, the question they propose to answer, the reasons why that question is important, the evidence they propose to use and how they intend to analyze it to answer their question. In the “pre-proposal” phase, no budget details would be requested. The authors of the most promising pre-proposals could then be given further guidance on preparing a final proposal, including budgetary limits, advice on other data, methods or institutional links they should take into account when preparing the final proposal.

The two-step review process should involve a proposal-review committee selected from amongst ECAPAPA’s Technical Advisory Pool, with a review-committee chair who is not an ECAPAPA staff member. The chair and members of the committee should be paid a honorarium, conditional on timely submission of

review reports. The ECAPAPA coordinating unit can then learn from experience who are the most reliable, successful reviewers, and retain them on future review committees.

The key intermediate results from this *policy-analysis* stage would be the new kinds of evidence (information) brought into regional policy debates, and used in policy-making. In evaluating proposals, it is therefore important to balance the importance of the issue with the likelihood that a study will yield new evidence. For example, coping with AIDS is an issue of major importance in the ECA region. But that does not mean that research proposals on AIDS are necessarily the most likely to generate valuable results. Research has an impact only if it introduces new evidence, leading to persuasive conclusions about actions to be taken.

3.4.4 Policy data: gathering evidence of technology impact and spillover, and providing information to inform policy choices

When asked about the impact of technical change or policy actions in and across countries, ECAPAPA's stakeholders repeatedly stressed the almost complete lack of reliable, systematic data through which to say how much any particular technology (such as hybrid maize) or policy change (such as market liberalization) was affecting farm production, household well-being or environmental conditions. As a result, policy making is made in a near vacuum of facts about how government investments and policy choices actually affect productivity, welfare and other social goals. Policy choices are guided by opinion rather than data. In the words of one stakeholder, policies come in "epidemics" of particular beliefs, rather than as data-driven decisions.

To equip policymakers and analysts with more reliable facts about the effects of agricultural technologies and policy changes of their interest over time and across countries, we propose that ECAPAPA initiate a substantial effort to add farm-technology data to existing census and survey efforts. Governments and donors already invested heavily in many kinds of data, notably demographic surveys, agricultural censuses, and agricultural information systems. But there is very little evidence on the impacts of new technology and policy change.

Low investment in farm-technology data is understandable when the pace of technical change is slow. But as policy constraints on technology adoption are lifted, and as the pace of innovation accelerates, donors and research agencies have been forced to undertake crash surveys in their particular areas of interest. Narrowly-targeted technology-adoption surveys, are appropriate when interest in the data is correspondingly narrow. But when the questions concern spillover effects across crops and across countries, and many institutions share a need for common data at the regional level, it is far more cost-effective to collaborate and develop multi-purpose datasets that can support a variety of policy-analysis research activities.

The history of agricultural surveys offers many examples of datasets that, once collected, receive little use and have little impact on policy. Perhaps the most common reason for this is that the purpose of data collection was too narrow or too vague, so that key variables are missed and the data are impossible to interpret. In the case of farm-technology data, experience with impact assessment activities around the world gives us clear guidelines on what data are needed to measure technical change,

the effects of innovation and spillovers, so as to guide future research towards policy objectives regarding household welfare, environmental conditions, or other concerns. Some of these data are available from existing sources, but certain kinds of data are consistently missing.

The key evidence needed to measure and compare technology performance across the region is data that distinguishes between kinds of technology, in terms of crop variety, animal breed, or farm-management technique. We need to know farmers' livestock populations and allocations of area planted, labor and input use, as well as output levels, market prices and traded volumes, broken down by the key technologies and key commodities in question. Since many different kinds of technologies could be distinguished, it is necessary to focus data collection resources on the key distinctions of concern to policy-makers. ECAPAPA would catalyze a collaborative approach to survey design and implementation, bringing together the NARIs (who have their own trial data on technical and financial performance of the technology, and are able to identify what farm-level distinctions would be technically feasible and desirable) with whatever other agencies undertake farm surveys in each country, and with the other policy-analysis community who will use the data to inform policy-makers.

A stylized picture of what we have in mind is as follows. In each country, a team leader (who could be a NARI socio-economist paid an honorarium, or someone preferably a socio-economist associated with an ASARECA network) would convene a group of 3-5 policy analysts representing key institutions, to design the survey instrument and supervise enumerators.

The key intermediate results from this activity would be the direct use of new survey data in policy debates (through citation of survey averages), and the discovery of new findings from the data (through analysis of survey data). Ultimate impacts would be better-informed policymaking, and hence higher rates of growth and poverty alleviation. Specific categories of policies to be informed are government investments and regulations affecting (a) technology adoption and spillover across regions and countries, (b) input supply and prices across regions and countries, and (c) product supply, demand and prices across regions and countries. Concrete examples might be the identification of gains from accelerating the multiplication of new hybrid maize seeds, leading to faster reform of the domestic seed sector, or the identification of regions whose, for example, coffee or oil crops production could be certified as organically produced under farmer-friendly conditions, leading to higher export prices in niche markets.

3.5 Implementation of ECAPAPA Activities

The RT's stakeholder consultations identified the following constraints to successful implementation of ECAPAPA's activities. These implementation constraints cut across many of ECAPAPA's activities, and indeed apply across ASARECA's other initiatives as well.

3.5.1 Contract execution

ECAPAPA's effectiveness hinges on how quickly and accurately it can disburse the funds needed to achieve program objectives. The RT found many stakeholders

concerned about costly delays, reporting requirements, and other kinds of friction inhibiting implementation. Especially highlighted by some institutional stakeholders was the divergence in some accounting procedures between ASARECA and collaborating institutions. Some degree of complaint is to be expected. Stringent financial controls are clearly needed, and we recognize the difficulty of meeting the reporting requirements of multiple donor agencies, while executing contracts through multiple institutions. ASARECA is to be commended for its remarkable achievements in taking on this task. **Given the increasing workload expected in the future, the RT believes that small changes in administrative procedures could have a major effect on the effectiveness of ECAPAPA's work.** Most notably, we suggest as follows:

To facilitate ASARECA's task, ECAPAPA's contracts should use a "purchase order" concept wherever possible, using technical criteria rather than cost accounting to support the disbursement of funds. For example, a grant could specify that funds are to be disbursed in three tranches -- one third on signature of a grant agreement acceptable to the ASARECA secretariat, another third on receipt of an interim progress report acceptable to the ECAPAPA coordinator, and a final payment on receipt of the research output judged acceptable by outside reviewers. Actual cost accounting could be bypassed entirely, that is, left to the accounting procedures of the collaborating institution, if the technical criteria are sufficiently stringent. (In other words, ECAPAPA would be buying the output, not the inputs, which is desirable as long as the key characteristics of the desired output can feasibly be enforced). To the extent that cost accounting is still needed (for large contracts, or where technical criteria are impractical to impose), we suggest that ASARECA be asked to prepare a very clear, concise set of "contract guidelines" which could be sent to all contractors who submit successful proposals, specifying exactly what are the cost and accounting guidelines for each project.

3.5.2 Size and Capacity of the Coordinating Unit

A few stakeholders would like the ECAPAPA Coordinating Unit to play a more direct role in guiding researchers and policy-makers. An example of this view from a stakeholder's email survey response is:

"ECAPAPA needs to provide much more leadership, not simply be a broker and service provider for a range of interests. If everyone in charge no one is in charge."


Other stakeholders favor the "service provider" role, and see it as fundamental to ECAPAPA's success. An example is this excerpt from another email response:

"ECAPAPA is expected to do more than just pursuing specific and punctual policy research results as others are doing, but to improve how those others are doing such policy research."

The RT believes that both arguments are correct. We agree with the first view that the ECAPAPA Coordinating Unit can and should provide more leadership in defining its activities, rather than waiting for stakeholders to define them. We also agree with the second view that those activities should focus on facilitating the work of existing institutions.

The RT's proposed framework is expected to help reconcile the two views set out above. The framework is expected to help the Coordinating Unit and the ASARECA Secretariat define and communicate ECAPAPA's role in a very specific manner, in terms of interventions that strengthen other institutions' contributions to policy-making. In so doing, ECAPAPA's activities promise to achieve high-impact results immediately, and simultaneously build capacity for even larger gains in the long run.

An important question is whether the current size and composition of the Coordinating Unit is appropriate for implementing the proposed framework. **The RT believes that the Coordinating Unit's role should remain one of *coordination and dissemination*, rather than implementation of policy research**⁴ -- but it is clear that the CU's professional staff must be tailored to the level and complexity of ECAPAPA's activity.

The framework outlined in this Mid-Term Review is expected to help define ECAPAPA's role more precisely, and in so doing to permit a substantial scaling-up of ECAPAPA activities. Expansion is needed because the ECA region is much larger than can be reached at ECAPAPA's current level of expenditure, and the ECAPAPA mode of operation shows great promise as very cost-effective approach to achieving policy dialogue and change in the region 

The proposed framework is intended to be flexible as to the scale of operation, as activities could be initiated in the "easiest" countries first, and then expanded as funding permits. The proposed framework could be used with current staffing levels, if the scale of operations does not grow. **But the RT believes that a larger programme along these lines would be desirable, and expansion would call for an additional professional position. A likely expansion path would be to recruit a professional Programme Officer responsible for all publications.**

A crucial feature of the proposed framework is that it aims to align ECAPAPA's interventions with stakeholders' own interests, to facilitate the coordination process. For example, the review suggests that a key activity would be national Policy Forums. These should be organized not by the Coordinating Unit, and not by a consulting firm hired for the job, but by a national Policy Forum program chair and his or her program committee. The Coordinating Unit's job is to choose an appropriate chairman, specify which local institutions must be represented on the program committee, and calculate what is an appropriate budget for that activity in each country. The national program committee could then draw on that budget as it constructs the event, and it would be in the committee members' own interest to spend the budget in the most cost-effective possible manner, so as to advance their own personal and institutional interests.

Another example of how ECAPAPA's interventions could be structured for maximum impact at minimum cost is the proposed initiative to strengthen farm survey data. The review accords a very high priority to the collection and dissemination of evidence

⁴ The fundamental reason for this is that policy analysis done within ECAPAPA's Coordinating Unit would be too far removed from national policy-making processes to have much impact. To achieve rapid and sustainable results it is preferable to work through national institutions that have a direct stake in policy outcomes, giving them the resources and incentives needed to work together to meet policy goals.

about agricultural technology performance in the region. But it is not appropriate for ECAPAPA itself to design or conduct farm surveys, or issue an RFP for this work. Instead the ECAPAPA Coordinating Unit should appoint a national data working group and invite them to propose a data collection strategy that meets their needs. The right individuals and institutions for that working group are those who need the data. If the ECAPAPA Coordinating Unit appoints the right people, it will be in their own interests to work together to design and implement appropriate surveys.

A final example is to make more use of the Technical Advisory Pool to provide peer-review and technical oversight. At several points, the RT has proposed offering honorarium payments in exchange for timely action on the part of outside reviewers. Doing so makes it in the reviewer's interest to meet the deadline and produce a credible report, so as to remain on the short list for such tasks in the future.

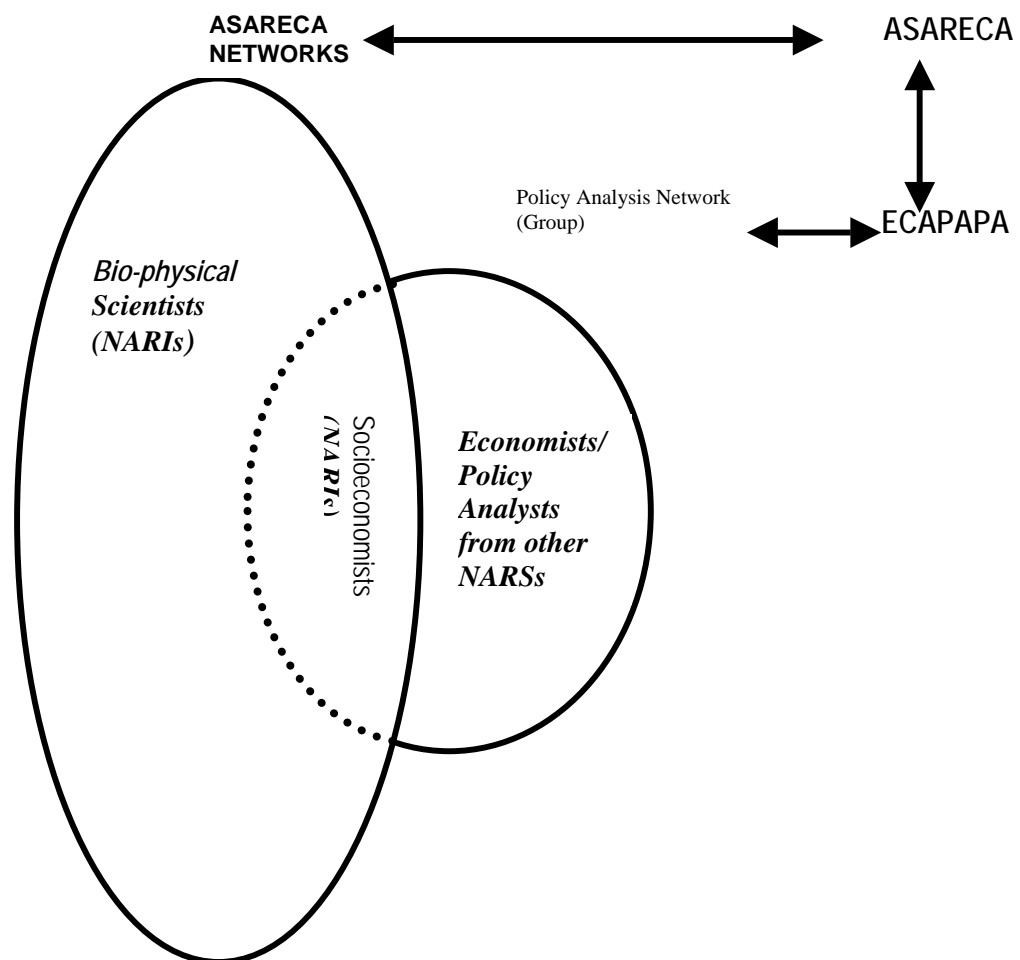
In summary, although the Coordinating Unit may not need additional policy-analysis capacity of its own, it is clear that to scale up activities it will be necessary to strengthen the Unit's administrative ability to manage activity and disburse funds. Particularly if ECAPAPA implements the RT's recommendation that ECAPAPA initiate a series of Policy Memos and Working Papers, it may be appropriate to hire a Program Officer to focus full-time on those publications, while the Programme Assistant handles correspondence, outreach and travel, and the Coordinator develop the partnerships needed for programme implementation.

3.5.3 Initiation of a Regional Policy Analysis Open Network /Policy Analysis group
ECAPAPA should continue strengthening its liaison with policy-analysis expertise in the region for more effective operation in the framework of a regional policy analysis open network or a regional policy analysis group. The group of socio-economists currently engaged in ASARECA's networks should form the core of the open network, linked to socio-economists and policy analysts from NARS and other policy research institutions in the region in a manner depicted in Fig. 3.

While the open policy network (group) will have its roots in the technology development and transfer domain, it will have off-shoots into NARSs, partly incorporating professionals in economics and policy analysis. This would assist in better linking farm-level data, technology transfer and good policy analysis. It would also provide the possibility of broadening policy analysis beyond the specific activities of the commodity networks and allow better utilization of the limited socioeconomic capacity in the region. Networking will include experienced as well as young economists and policy analysts so that capacities are upgraded through research undertakings.

Now that ECAPAPA is striving to implant the culture of impact assessment into its commodity-oriented networks of ASARECA, the proposed policy analysis group would be the vehicle through which this activity is pursued. It will further form a strong institutionalized arm of ECAPAPA's CU that cuts across ASARECA networks to delineate policy research projects/activities under ECAPAPA's proposed research issues.

Fig. 3. Formation of a Policy Analysis Open Network (Group) with interface to ASARECA Networks



Obviously, the emerging projects/activities will accommodate the economic and policy analyses specific to the commodity-related agenda of ASARECA's networks, but will go beyond that to address policy issues that may entail looking across commodities, commodity interactions and the implications for wider policy agenda. The network will be in a position to define the needs for capacity building within the domain of the identified research activities and may take advantage of its experienced members to internalize certain training activities. The networking exercise will enable the design of unified methodology for certain identified common research activities and will form a means by which issues are viewed from a regional perspective. Further, the group will engage in initiating policy dialogue and providing material for publication. ECAPAPA's CU will be fostering the undertakings of the group through organizing forums, engaging in the identification of research activities, providing research funding and supporting capacity building.

3.6 Performance Targets and Expected Outputs

In the proposed framework, implementation of activities targeting the four stages of the policy change process would yield various measurable outputs and intermediate

results. Note that progress in all four areas is made simultaneously, concerning a number of different policy issues.

Some specific issues on which progress will be made can be identified now, while others will be determined in the process of implementing the workplan. The specific quantitative targets for each intermediate result should be defined by the ECAPAPA Coordinating Unit and stakeholders, as a function of the scale of activity permitted by the available funding.

The overall purpose of all ECAPAPA's activities should be the implementation of policies that facilitate increased generation and adoption of more appropriate new technologies and institutional arrangements in ECA agriculture.

To achieve this purpose, the proposed framework suggests four strategic objectives that build capacity and drive change in each of the four elements of the policy-change cycle illustrated in Figure 1.

3.6.1 Strategic Objective 1: Regional and national policy debates use socio-economic analyses of alternative public investments and policy options

ECAPAPA has demonstrated its strong advantage in reaching across national and institutional boundaries to create mixed teams of researchers, whose analyses can enter policy debates with a high degree of relevance and credibility. The immediate policy issue whose outcome is most likely affected by achieving this strategic objective is the relative priority to be accorded to public investment in research versus other public goods, and the relative importance of privatization and trade liberalization versus other policies in achieving policy goals.

Intermediate Result #1.1

Requests for proposals have been designed and disseminated, with a structure designed to elicit proposals that exploit local opportunities for analysis to influence policy, subject to a review process that assures quality, relevance and cost-effectiveness. A likely structure will award higher priority to proposals using mixed teams of researchers, using pre-existing data in new ways, and using well-defined methods to measure the costs and benefits of actual policy choices. The likely review procedure will involve a two-step process (brief pre-proposals to identify the most likely candidates, who can then be assisted to write more promising full proposals), and reviews by selected members of the Technical Advisory Pool.

Intermediate Result #1.2

Research teams' proposals are accepted and funds disbursed in a timely, progressive manner. Wherever possible, the disbursement of research funds should be made against delivery of technical reports that meet the expectations of outside reviewers, on a purchase-order basis (that is, without any need for cost accounting beyond what is done internally by the executing institutions).

Intermediate Result #1.3

Analytical results are available for use in policy dialogue (see results area #3 below).

3.6.2 Strategic objective 2: Implementation agencies brought together to harmonize and rationalize policy changes

Through its seed sector activities, ECAPAPA has established a strong reputation as an effective contributor to the process of bringing together the implementation agencies responsible for carrying through policy changes on which there is already widespread agreement. Seed-sector harmonization activities will continue to be an important, resource-intensive priority for the Coordinating Unit, but with sufficient funding a second (or third) area for intervention may be undertaken.

Intermediate Result #2.1

Seed-sector actors harmonize legislation and procedures to facilitate dissemination and adoption of new genetic material within and across countries.

Intermediate Result #2.2

A second action area for ECAPAPA support is identified and pursued. The principal criterion is whether there is *clear agreement* at the highest levels of government on the desired direction of policy change, but a *need for agreement* among implementation agencies on how to carry out the change. It is therefore likely that ECAPAPA interventions will be desirable only where a substantial previous effort in policy research and sensitization of high-level policymakers has already occurred, as was the case with seed-policy harmonization. The emerging situations ripe for ECAPAPA policy action appear to be:

- (a) Obtaining agreement on biotechnology/biosafety guidelines and regulations, to facilitate the flow of innovations in that area as they become available – the technical groundwork having been laid by ASARECA's biotech network.
- (b) Obtaining agreement on grades and standards for maize and other products to be used in local and regional trade.
- (c) Obtaining agreement on certification procedures for specific attributes of coffee and other export crops, to attract price premiums associated with "organic", "environment-friendly", or "fair trade" status.

3.6.3 Strategic objective 3: Research results are disseminated and discussed across national and institutional boundaries

ECAPAPA is poised to serve as the region's pre-eminent source of policy-relevant research results. By linking researchers with policymakers, ECAPAPA can increase both the supply of and the demand for high-quality research. Here the principal policy issue to be affected by achieving this strategic objective is whether the region's socioeconomists can and do respond to policymakers' needs.

Intermediate Result #3.1

The ECAPAPA Newsletter delivers a continued flow of publication abstracts and other information to researchers and policy-makers, who respond with requests for complete publications or additional information.

Intermediate Result #3.2

ECAPAPA Policy Memos are written, archived and disseminated across the ECA region. The Policy Memos are 1-4 page summaries of research results. Researchers receiving ECAPAPA funding should be required to write ECAPAPA policy memos, and other researchers should be paid to write policy memos summarizing work funded

by other institutions – this is a valuable form of “recycling”. Policy memos should be rigorously peer-reviewed and carefully edited for maximum impact.

Intermediate Result #3.3

ECAPAPA Working Papers are written, archived and disseminated across the ECA region. The Working Papers are 15-50 page reports documenting research methods, data and policy implications. Again, researchers funded by ECAPAPA should be required to submit Working Papers, and others should be invited to do so, but since working papers are merely repositories of what was done relatively little peer review or editing is required.

Intermediate Result #3.4

An academic journal publishing rigorously peer-reviewed articles by ECA authors is re-established, to elicit and disseminate high-quality presentation of policy-relevant research in agricultural economics.

Intermediate Result #3.5

National Policy Forum chairmen and program committees are appointed and funded, to solicit and guide researchers’ presentations and attract policymakers to one-day Policy Forum events, at which the results of various research efforts regarding agricultural technology and policy are debated.

3.6.4 Strategic objective 4: Regional and national policy debates use survey data on technology and policy impacts and spillovers

ECAPAPA is uniquely placed to meet this strategic objective, by offering opportunities for locally-based organizations to generate and disseminate the survey data that is most relevant to active policy debates, within and across countries. The immediate policy issue whose outcome is likely to be influenced by achieving this objective is the question of how well the available “shelf” of new technologies performs in different countries, and what technological and institutional priorities should drive national and regional investments. For example, if surveys show that maize hybrids from Kenya are (or are not) out-performing locally bred maize hybrids in Uganda, then the importation of Kenyan seeds would be (or not be) a high priority.

Intermediate Result #4.1

National data committees are formed, which could be led by members of ASARECA networks or NARI socio-economists, with representatives of the extension service, the national statistics service, local universities and any others involved in rural survey activity such as NGOs and independent or government-based policy analysis units. They submit data-strengthening proposals to the ECAPAPA Coordinating Unit.⁵ Proposals should specify how to strengthen national farm survey activities by including (a) an inventory of recent farm survey activity in the country,

⁵ An example may be helpful here. In Ethiopia, based on the RT’s interviews and readings, the technologies most likely to be targeted include the impact of hybrid maize, improved sorghum and DAP/Urea fertilizer application; the key institutional questions include how livestock and cereal grains are marketed, and a major policy question is whether loans for fertilizer are cost-effective in raising production or reducing soil degradation. All of these could be addressed by linking researchers from EARO, EDRI, ILRI and IFPRI with the household survey activities currently being undertaken by AAU. ECAPAPA’s initiative would offer just enough supplementary funding to permit these organizations to collaborate across institutional lines, and more effectively inform policy-makers about technology and policy.

(b) a list of 6-10 priority agricultural technologies, institutional innovations or policy changes for which measuring the effects could influence future policy, (c) letters from local policy researchers collaborators expressing interest in using the data, and (d) a workplan/budget for implementing the proposal. A suggested budget ceiling is US\$50,000 per year, supplementing what is available from other sources to cover the additional expenses associated with meeting the regional needs for consistency across countries and across institutions.. These activities are then coordinated and funded simultaneously in several countries. The ECAPAPA Coordinating Unit has compared the proposals, identified opportunities for the national committees to collect complementary data on each side of a common border (e.g. following the adoption in Uganda of maize hybrids from Kenya), and arranged for funding of the proposed activities.

Intermediate Result #4.2

National farm-technology survey data are cleaned and made available to local researchers and the ECAPAPA Coordinating Unit, along with documentation of the data. In addition to the dataset itself, printed survey reports should contain a copy of the questionnaires, and descriptive statistics on all variables (number of observations and their mean, maximum, minimum and standard deviation).

Intermediate Result #4.3

Descriptive statistics on farm technology performance are available for use in ECAPAPA-funded policy dialogue (see results area #3 below), and are also disseminated by others and cited in policy debates by journalists, policy analysts, interest groups and government officials.

Intermediate Result #4.4

Farm-level data on agricultural technology performance are available for use in policy analysis by ECAPAPA-funded researchers (see results area #2 below), and also disseminated by others and used in analyses by local and foreign researchers in studies of the rate of return to research, the impact of policy change on farm households, and the evolution of farming systems across the ECA region.

3.7 Expected Impacts and Criteria for Programme Evaluation

The principal impacts expected from ECAPAPA's intervention are faster economic growth, more poverty alleviation, and greater environmental sustainability than would otherwise occur.

The key mechanism through which ECAPAPA's interventions are expected to achieve these impacts is faster adoption of new agricultural technologies and institutions, which in turn is to be facilitated by an improved policy-change process as measured by the intermediate results listed above.

Our expectation that adoption of new technologies and institutions can simultaneously meet three very different policy goals (more growth, less poverty, and more sustainability) comes from experience with agricultural transformation around the world. The principal mechanism for this is that improved germplasm raises the reward to smallholder farmers of using their labor and other inputs on existing cropped area, reducing the real economic and environmental cost of production.

Of course not all technological or institutional innovations succeed in meeting all three policy goals, or even any one of them. The purpose of biophysical and socioeconomic research is to learn which innovations are most promising, and to design interventions through which the most successful innovations can spread. Any effort to prejudge the outcome of the research process is therefore counter-productive, reducing the ultimate impact of investments in research.

The ideal way to assess the ultimate impact of ECAPAPA's activities would be through measurement of economic growth, poverty levels and environmental degradation rates, and comparison of actual performance with the performance that would have occurred if ECAPAPA's activities had not been undertaken. Since such comparisons are exceedingly costly and require the formidable task of isolating ECAPAPA's impact from that of other interventions (to measure actual poverty or environmental degradation rates would cost many times ECAPAPA's annual expenditure), it is necessary to draw on the lessons learned from previous analyses of what determines growth, poverty and sustainability.

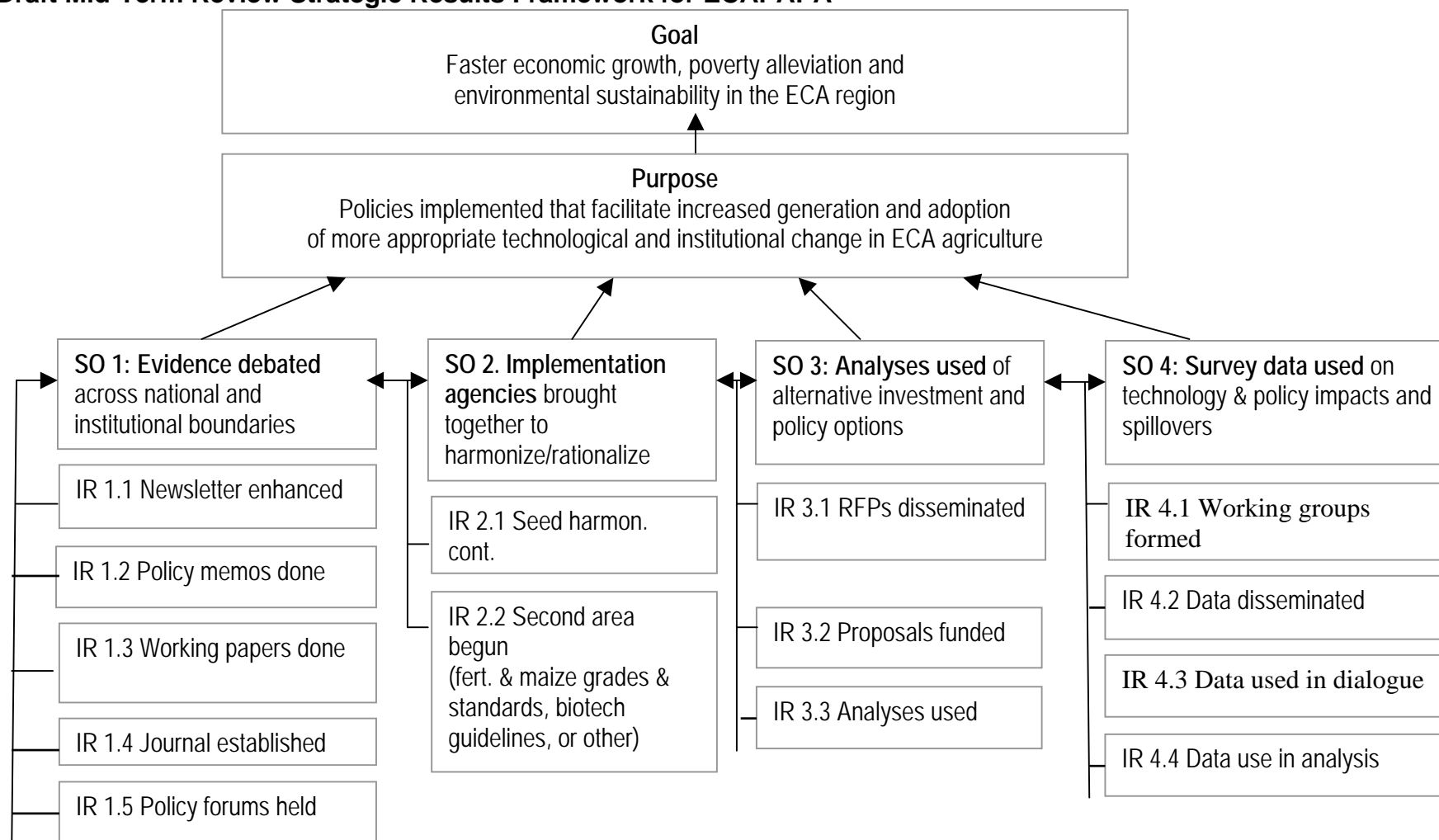
A more feasible way to measure ECAPAPA's contributions to ultimate impacts is by measuring farm productivity levels (the value of output relative to the value of inputs, measured as broadly as possible to include soil loss, deforestation etc.), and comparing the region's actual performance with expected performance in the absence of new technologies or policies associated with ECAPAPA's activities. This is sufficiently difficult, however, that it will be feasible to do only after several years of investment in the same data collection and analytical capabilities that are needed to inform technical and institutional change in the first place.

In the medium term, the most feasible way to measure ECAPAPA's impacts is through case studies of specific interventions. Such case studies are costly in themselves, and reliable results are obtainable only where there has been some previous investment in the same data needed to inform technical and institutional change. It is likely that, after two or three years of operations using the Mid-Term Review's proposed framework, several opportunities for case studies of ECAPAPA's impact could be undertaken to assess specific initiatives such as seed harmonization. Useful impact-assessment results are unlikely to be obtained, however, where the farm technology survey data needed for phase one of the policy-change process are not available.

3.8 Proposed results framework

The results framework that follows from this Mid-Term Review is illustrated in Figure 3, in terms of the standard diagrams currently used by USAID. This results framework is intended to meet all of the targets expected under the draft strategic results framework elaborated by the ECAPAPA Coordinating Unit in August 2000, but is more explicit as to specific implementation modalities, offering a clearer set of milestones to be reached along the way towards achieving the programme's goals.

Figure 3.
Draft Mid-Term Review Strategic Results Framework for ECAPAPA



Annex 1.**Background Data on Agricultural Research in East and Central Africa**

This annex is intended to provide a summary of some important data on agricultural research investments in East and Central Africa, demonstrating the nature and magnitude of the challenge facing ECAPAPA.

Table A1 sets out the level of expenditure on agricultural research, for the 1961-91 time period and five ECAPAPA countries covered by the Agricultural Science and Technology Indicators (ASTI) data collected by ISNAR and IFPRI. Column 1 shows that all programs except Madagascar's were growing in real terms throughout the period. But only in Ethiopia was this increase fast enough to keep up with population and output growth. As a result, spending as a proportion of agricultural output (from FAO data) or real GDP (from the Penn World Tables 5.6) generally decreased after 1970. Spending per capita and per worker in agriculture fell even faster, and in some countries (Madagascar, Rwanda and Sudan) there was even a decline in expenditure per hectare of cropped area (again from FAO estimates).

Table A2 sets out the comparable data for the 12 countries outside ECAPAPA for which ASTI data are available. There is substantial variation across countries in the absolute size and relative intensity of agricultural research expenditure, but in general these countries' programs grew faster and had smaller declines in expenditure per worker or per capita than the countries of the ECAPAPA-region. Thus the ECAPAPA countries include some particularly severe cases of the Africa-wide decline in investment, providing dramatic evidence of severe problems in priority-setting across the region.

Table A3 contrasts the African data with comparable figures from the rest of the world, showing that expenditure in other LDCs and in the world as a whole grew much faster than in Africa. Africa's share of global agricultural research fell from 9.6 to 6.5 percent, and its share of agricultural research in all LDCs fell even faster, from 23.4 to 12.1 percent. To understand the causes and consequences of this decline, it is necessary to reflect on why public agricultural research is undertaken in the first place.

Soon after scientific methods for plant and animal improvement were discovered in the 19th century, government-funded experiment stations were established in Germany, the United States, Japan and Britain. They developed new varieties of wheat, rice, and other crops, and discovered principles of plant nutrition and protection that permitted rapid and sustained growth in yields per acre and per worker in these countries, releasing a steady flow of resources to the non-farm sector.

Crop breeding and agronomic research, unlike many other kinds of R&D, was undertaken mostly in the public sector because the innovations spread too easily from farm to farm for patents to be enforceable. In contrast, chemical and mechanical innovations for agriculture as well as for industry were developed by private

entrepreneurs, thanks to the difficulty of imitation and government enforcement of intellectual property rights.

In the 20th century, a global public-sector agricultural research system emerged, crossing varieties from around the world to obtain even higher yields than was possible by scientific selection from local material. The first big payoff came from crossing the Japanese Norin-10 genes for semi-dwarf stature into Indian rice, followed by similar innovations for wheat and maize. These and other fruits of international exchange permitted most of the world's rice, wheat and maize-growing areas to enjoy rapid growth of crop yields and hence farm and non-farm incomes.

Table A4 shows the economic payoff to worldwide research expenditure by region, in terms of economic rates of return per dollar invested. These data are from a “meta-analysis” of all cost-benefit studies done to date. They show a very wide range of economic impacts, as would be expected from any kind of research which, by definition, consists of looking for something as yet unknown. Because this range is so wide, there is no statistical difference between the results obtained in Africa and elsewhere. The mean and median results are lower, but this could well be due to random chance given the relatively small number of studies ever completed. And in any case, the average rate of return is very high – much larger than typical returns on World Bank projects or private-sector investments.

Africa is distinctive not in having lower rates of return to research, but in having much lower levels and growth rates of research expenditure. Because of this, the adoption of new varieties lags well behind the rest of the world – about 20 years behind Latin America, and 30 years behind Asia, as shown in Figure A1. African farmers' adoption of improved food crops is growing quickly, but is a remarkably recent phenomenon: over half of today's estimated adoption occurred after 1990. Almost all of this is the adoption of “first-generation” improved varieties, whereas in Asia and Latin America many farmers have benefited from a long sequence of improvements.

The data in Figure A1 are drawn from the exhaustive survey of crop genetic improvement conducted by Robert E. Evenson and colleagues for a system-wide review of the CGIAR, to be presented at the CGIAR Mid-Term Meetings in May 2001. Using the adoption data underlying Figure A1, and tracing the lineage and yield gains associated with each new variety involved, Evenson and colleagues produced estimates of the output effect of crop improvement by region, separating out the gains generated by adding internationally-exchanged lines from IARCs to the genetic material developed within each country by NARS. These results are shown in Table A5 (computed from Evenson's Table 23-6).

The results of Table A5 show that Africa not only has had exceptionally low levels of crop improvement, but also that a somewhat larger proportion of its improvements have come from IARC activity than is true for the rest of the world. For the aggregate of all food crops, 52 to 55 percent of Africa's very small crop-improvement effect is estimated to be due to the introduction of overseas material from IARCs, whereas this accounts for 39 to 41 percent of the much larger gains achieved in developing countries as a whole.

In summary, a major contributing factor to slow growth of African agriculture is slow growth of its agricultural research activities, with low levels of expenditure accounting for the low level of impact. Since agricultural research is a fundamentally public-sector activity, this situation reflects the priorities of the policy-makers responsible for public sector investment. ECAPAPA's challenge is to help change those priorities, by influencing what policy-makers know about agricultural research and its potential contribution to policy goals.

Table A1. Agricultural R&D in Five ECAPAPA Countries, 1961-91 (five-year averages)

	level of R&D (1985US\$m.)	R&D as a percent of: agric. output	total GDP	R&D per hectare:		R&D per person:	
				cropped	arable	ag.worker	total pop.
Ethiopia							
1961-65	2.832	0.12%	0.04%	0.56	0.02	0.25	0.12
1966-70	7.851	0.30%	0.10%	1.14	0.06	0.62	0.28
1971-75	11.607	0.45%	0.12%	1.59	0.09	0.84	0.37
1976-80	17.053	0.61%	0.15%	2.34	0.13	1.12	0.48
1981-85	23.070	0.76%	0.18%	3.16	0.17	1.37	0.56
1986-91*	45.818	1.42%	0.23%	6.28	0.35	2.42	0.72
Kenya							
1961-65	24.337	2.19%	0.45%	5.93	0.70	6.04	2.71
1966-70	37.149	2.87%	0.52%	8.53	1.06	8.13	3.46
1971-75	54.568	3.58%	0.53%	11.86	1.54	10.48	4.28
1976-80	59.821	3.17%	0.44%	12.47	1.57	9.87	3.88
1981-85	64.901	3.15%	0.41%	13.44	1.69	9.10	3.47
1986-91	80.281	2.97%	0.39%	16.13	2.01	9.35	3.49
Madagascar							
1961-65	21.993	2.02%	0.33%	9.12	1.12	8.66	3.82
1966-70	27.502	2.18%	0.38%	9.49	1.35	9.86	4.27
1971-75	24.416	1.80%	0.31%	7.06	1.15	7.95	3.40
1976-80	17.384	1.17%	0.22%	3.53	0.72	5.03	2.11
1981-85	13.323	0.84%	0.18%	2.49	0.54	3.43	1.41
1986-91	14.807	0.85%	0.19%	2.58	0.59	3.34	1.33
Rwanda							
1961-65	2.757	0.95%	0.22%	1.95	0.56	1.76	0.91
1966-70	3.813	0.99%	0.20%	2.31	0.73	2.18	1.10
1971-75	3.188	0.70%	0.12%	1.60	0.51	1.60	0.78
1976-80	4.620	0.79%	0.14%	1.85	0.63	1.99	0.95
1981-85	5.990	0.86%	0.13%	2.09	0.74	2.22	1.06
1986-91	13.853	1.97%	0.28%	4.52	1.64	4.29	2.10
Sudan							
1961-65	87.911	4.93%	na	125.59	0.80	23.26	na
1966-70	115.350	5.67%	1.08%	148.08	1.01	28.96	8.82
1971-75	125.616	4.98%	1.04%	144.07	1.05	29.22	8.06
1976-80	121.205	4.15%	0.74%	121.20	0.98	25.58	6.72
1981-85	145.161	4.60%	0.82%	105.46	1.16	27.19	6.98
1986-91	160.273	5.08%	0.84%	73.34	1.25	26.65	6.65
ECAPAPA average (5 countries)							
1961-65	27.966	2.04%	0.26%	28.63	0.64	7.99	1.89
1966-70	38.333	2.40%	0.45%	33.91	0.84	9.95	3.58
1971-75	43.879	2.30%	0.42%	33.23	0.87	10.02	3.38
1976-80	44.017	1.98%	0.34%	28.28	0.81	8.72	2.83
1981-85	50.489	2.04%	0.34%	25.33	0.86	8.66	2.70
1986-91*	63.006	2.46%	0.39%	20.57	1.17	9.21	2.86

Source: Authors' calculations, from data on R&D expenditure documented in P.G. Pardey, J. Roseboom and N.M. Beintema, "Investments in African Agricultural Research," World Development 25(3), March 1997: 409-423, combined with data on agricultural output, land area and agricultural workers from FAOStat (www.fao.org), and data on total GDP and population from the Penn World Tables 5.6.

Note: For Ethiopia GDP and population, the 1986-91 period is represented by 1986 only.

Table A2. Agricultural R&D in 12 non-ECAPAPA Countries, 1961-91 (five-year averages)

	level of R&D (1985US\$m.)	R&D as a proportion of:		R&D per ha. of		R&D per person:	
		agric. output	total GDP	cropped	arable	ag.worker	total pop.
Botswana							
1961-65	0.415	0.38%	0.13%	41.51	0.10	1.83	0.79
1966-70	1.644	1.31%	0.37%	164.43	0.41	7.11	2.75
1971-75	3.576	2.48%	0.44%	205.55	0.89	14.90	5.08
1976-80	6.234	4.53%	0.44%	311.70	1.55	24.95	7.31
1981-85	12.047	7.59%	0.60%	602.37	2.98	47.10	12.04
1986-91*	9.711	6.19%	0.36%	411.61	2.36	37.75	8.54
Burkina Faso							
1961-65	1.800	0.50%	0.09%	10.67	0.08	0.68	0.37
1966-70	2.810	0.66%	0.13%	14.05	0.13	1.00	0.52
1971-75	3.816	0.93%	0.16%	17.56	0.16	1.25	0.64
1976-80	6.077	1.32%	0.20%	16.86	0.23	1.81	0.91
1981-85	8.311	1.45%	0.23%	13.50	0.29	2.24	1.10
1986-91	13.317	1.63%	0.30%	21.91	0.39	3.16	1.52
Ghana							
1961-65	13.764	1.57%	0.20%	0.86	0.81	6.22	1.86
1966-70	17.687	1.77%	0.23%	1.11	1.04	7.45	2.13
1971-75	20.483	1.74%	0.22%	1.28	1.19	7.70	2.18
1976-80	18.952	1.99%	0.20%	1.13	1.02	6.34	1.84
1981-85	13.484	1.39%	0.14%	0.82	0.62	3.89	1.14
1986-91	32.717	2.61%	0.27%	2.16	1.26	8.11	2.31
Cote d'Ivoire							
1961-65	22.574	3.37%	0.41%	1.85	1.51	13.44	5.27
1966-70	28.824	3.32%	0.38%	1.97	1.73	16.99	5.63
1971-75	34.824	3.17%	0.33%	2.02	1.87	19.94	5.60
1976-80	36.494	2.57%	0.23%	1.65	1.78	19.18	4.80
1981-85	36.617	2.21%	0.25%	1.43	1.61	17.35	4.05
1986-91	37.062	1.79%	0.24%	1.14	1.45	15.33	3.31
Lesotho							
1961-65	0.495	0.75%	0.14%	na	0.14	2.59	0.53
1966-70	1.176	1.56%	0.25%	na	0.32	5.98	1.14
1971-75	2.322	2.94%	0.33%	na	0.65	11.27	2.04
1976-80	3.031	3.73%	0.25%	na	1.00	13.74	2.38
1981-85	3.750	4.24%	0.25%	na	1.28	15.39	2.57
1986-91	3.008	3.29%	0.18%	na	0.96	10.91	1.77
Malawi							
1961-65	9.175	2.23%	0.62%	15.12	2.58	4.85	2.43
1966-70	15.895	3.20%	0.82%	24.06	1.40	7.64	3.70
1971-75	18.988	3.05%	0.78%	27.88	1.61	8.27	3.85
1976-80	21.370	2.94%	0.69%	27.51	1.74	8.23	3.69
1981-85	23.991	3.07%	0.71%	26.94	1.81	8.19	3.56
1986-91	28.319	3.34%	0.69%	26.20	1.85	7.67	3.51
Mauritius							
1961-65	3.857	na	0.17%	na	na	na	5.44
1966-70	6.002	na	0.27%	na	na	na	7.56
1971-75	7.746	na	0.32%	na	na	na	9.00
1976-80	8.147	na	0.21%	na	na	na	8.74
1981-85	10.494	na	0.26%	na	na	na	10.45
1986-91	11.243	na	0.20%	na	na	na	10.63

Table A2 (continued).

	level of R&D (1985US\$m.)	R&D as a proportion of:		R&D per ha. of		R&D per person:	
		agric. output	total GDP	cropped	arable	ag.worker	total pop.
Niger							
1961-65	2.505	0.43%	0.12%	0.10	0.11	1.50	0.72
1966-70	3.803	0.58%	0.13%	0.16	0.15	2.00	0.96
1971-75	3.678	0.66%	0.12%	0.15	0.15	1.75	0.83
1976-80	8.998	1.23%	0.26%	0.36	0.28	3.72	1.73
1981-85	9.796	1.45%	0.25%	0.39	0.28	3.51	1.59
1986-91*	12.673	1.70%	0.36%	0.50	0.35	3.92	1.91
Nigeria							
1961-65	62.620	1.12%	0.19%	na	0.24	4.78	1.12
1966-70	84.519	1.37%	0.24%	na	0.31	5.93	1.34
1971-75	128.516	2.06%	0.20%	na	0.47	8.70	2.20
1976-80	192.283	3.23%	0.20%	na	0.69	13.21	2.89
1981-85	157.571	2.36%	0.16%	na	0.56	10.79	2.04
1986-91	89.138	0.94%	0.10%	na	0.30	5.99	0.97
Senegal							
1961-65	18.313	2.56%	0.44%	610.43	0.78	13.19	4.88
1966-70	20.433	3.06%	0.44%	681.11	0.87	13.10	4.91
1971-75	25.127	3.42%	0.50%	628.17	1.07	14.32	5.53
1976-80	33.156	4.85%	0.55%	495.57	1.42	16.91	6.34
1981-85	42.469	5.99%	0.60%	351.12	1.82	19.37	7.00
1986-91	32.025	3.68%	0.40%	159.77	1.37	13.24	4.58
Zambia							
1961-65	5.461	2.00%	0.17%	66.25	0.11	4.14	1.59
1966-70	10.854	3.39%	0.25%	110.52	0.22	7.50	2.75
1971-75	15.888	3.97%	0.29%	137.49	0.32	10.08	3.48
1976-80	18.382	4.02%	0.34%	139.75	0.37	10.50	3.47
1981-85	22.579	5.40%	0.41%	143.30	0.44	11.70	3.60
1986-91	19.846	3.65%	0.35%	108.26	0.37	9.26	2.59
Zimbabwe							
1961-65	15.679	2.51%	0.41%	15.68	0.79	9.99	3.86
1966-70	21.314	2.89%	0.43%	21.31	0.95	12.17	4.34
1971-75	28.230	2.77%	0.40%	28.23	1.16	14.33	4.92
1976-80	28.767	2.66%	0.37%	28.77	1.17	13.02	4.37
1981-85	32.904	2.97%	0.33%	31.05	1.23	12.99	4.21
1986-91	42.695	3.27%	0.39%	36.48	1.57	14.28	4.55
Non-ECAPAPA average (12 countries)							
1961-65	13.055	1.58%	0.26%	na	0.66	5.75	2.40
1966-70	17.913	2.10%	0.33%	na	0.69	7.90	3.14
1971-75	24.433	2.47%	0.34%	na	0.87	10.23	3.78
1976-80	31.824	3.01%	0.33%	na	1.02	11.96	4.04
1981-85	31.168	3.47%	0.35%	na	1.17	13.86	4.45
1986-91	27.646	2.92%	0.32%	na	1.11	11.78	3.85

Source: As for Table A1.

Note: * For Botswana and Niger total GDP and pop., the 1986-91 period is represented by 1986-1989 only.

Table A3. Agricultural research expenditure in Africa and the rest of the world

	1971	1981	1991
Real US\$ (millions)			
World (153 countries)	7,304	11,247	14,966
LDCs (131 countries)	2,984	5,503	8,009
Sub-Sah. Af. (44 co.)	699	927	968
Expenditure shares			
LDCs as % of world	40.9%	48.9%	53.5%
SSA as % of world	9.6%	8.2%	6.5%
SSA as % of LDCs	23.4%	16.8%	12.1%
Expenditure growth (%/yr)			
World	4.3%	2.9%	3.6%
LDCs	6.4%	3.9%	5.1%
SSA	2.5%	0.8%	1.6%

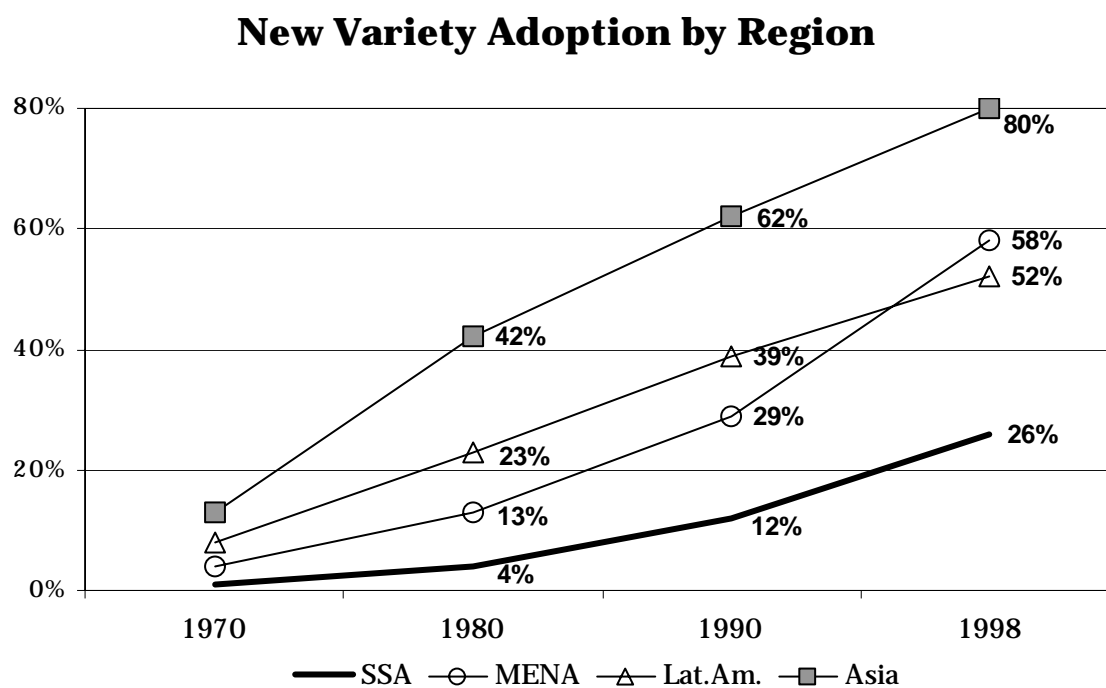
Source: Pardey, Roseboom and Craig 1999, p. 56.

Table A4. Rates of return to agricultural research by region

	Studies (no.)	Rate of Return (% per year)		
		Median	Mean	Std.Dev.
World	1,772	44.0	81.2	216.1
LDCs	683	43.0	60.1	84.1
Africa	188	34.3	49.6	113.0

Source: Alston et al. 2000, p. 62.

Note: Region differences are not statistically significant.

Figure A1.

Source: Drawn from data in R.E. Evenson, CGIAR system-wide impact assessment (May 2001).

Table A5. Estimated percentage of current output attributable to IARC and all crop genetic improvement since 1965

	All food crops		Wheat		Rice		Maize		Other Grains		Potatoes		Oth. Root Cr.	
	low	high	low	high	low	high	low	high	low	high	low	high	low	high
Sub-Saharan Africa														
All crop improvement	2.04	3.32	9.30	10.10	1.60	2.00	2.00	3.40	2.00	5.00	22.50	26.30	1.80	2.50
IARC crop improvement	1.15	1.73	3.60	3.80	1.60	2.00	1.60	1.90	1.10	1.90	10.80	14.00	0.90	1.50
proportion due to IARCs	56%	52%	39%	38%	100%	100%	80%	56%	55%	38%	48%	53%	50%	60%
Middle East-North Africa														
All crop improvement	17.56	20.66	27.10	31.50	3.00	3.50	3.30	3.90	3.50	5.10	22.50	26.90	na	na
IARC crop improvement	7.36	7.87	10.90	11.60	3.00	3.50	2.40	2.50	1.60	1.70	10.60	15.00	na	na
proportion due to IARCs	42%	38%	40%	37%	100%	100%	73%	64%	46%	33%	47%	56%	na	na
Asia (including China)														
All crop improvement	20.12	22.00	26.70	30.80	12.90	16.30	27.50	33.30	27.50	32.10	24.10	29.80	0.60	1.60
IARC crop improvement	8.30	9.13	10.70	11.40	5.30	5.90	12.00	13.30	10.00	10.60	3.90	4.10	0.60	1.60
proportion due to IARCs	41%	41%	40%	37%	41%	36%	44%	40%	36%	33%	16%	14%	100%	100%
Latin America														
All crop improvement	15.41	18.32	25.60	29.60	9.60	12.00	15.80	18.00	26.80	31.10	23.80	28.20	1.50	4.00
IARC crop improvement	5.41	5.62	12.30	14.60	3.80	4.30	3.40	4.10	9.80	10.30	4.60	5.00	1.50	4.00
proportion due to IARCs	35%	31%	48%	49%	40%	36%	22%	23%	37%	33%	19%	18%	100%	100%
All developing countries														
All crop improvement	15.85	18.63	25.00	28.60	12.10	15.20	21.00	24.90	14.00	14.60	24.50	29.10	2.00	2.50
IARC crop improvement	6.48	7.30	10.40	11.60	5.10	5.70	8.50	9.30	4.90	5.20	4.90	5.40	1.10	2.10
proportion due to IARCs	41%	39%	42%	41%	42%	38%	40%	37%	35%	36%	20%	19%	55%	84%

Source: Computed from data in R.E. Evenson, CGIAR system-wide impact assessment (May 2001).

Annex 2.

Terms of Reference for the ECAPAPA Mid Term Review

1. Programme Objectives and Evolution of the ECAPAPA Agenda

The overall objectives of ECAPAPA as established by the Committee of Directors of ASARECA are:

- 1.1 To strengthen the capacity of the NARS in the ECA countries in socio-economic research to enable them to become more responsive to existing agricultural policies and more proactive in policy research and analysis as related to the technology development and transfer systems so as to increase the effectiveness and efficiency.
- 1.2 To strengthen the capacity of agricultural policy research, analysis and formulation by engaging agricultural researchers in making available to policy makers and other leaders research results on policy issues and on the implications of competing policy options for agricultural productivity, overall production and sustainability of the entire agricultural sector of the ECAPAPA countries.

In the past three years ECAPAPA has made significant progress in planning and laying the necessary infrastructure for a regional policy programme. And, while progress has been made on selected policy issues, in general less has been achieved in developing a substantive policy research agenda capable of delivering on the programme objectives in the medium and long term. A focus of this mid term review is to assist the ECAPAPA and ASARECA coalition identify and articulate agenda options for a regionally focused policy programme.

Over the past several years there have been numerous substantive consultations among ECAPAPA stakeholders, including the regional steering committee – the governing regional organ of ECAPAPA. Emerging from this consultation is a growing consensus that ECAPAPA efforts and investments over the next five to ten years should contribute to the following development results:

- An increase in the value and volume of agricultural commodities moving across national and regional boundaries,
- Increased efficiency in regional market systems,
- Increased investment by private and public sector entities in making relevant efficient agricultural services available to rural households and other participants in the commodity systems, which are important to Eastern Africa economic development,
- Increased efficiency of research systems in delivering technology and services that contribute to increased competitiveness of targeted agricultural commodities and products.

Some progress has been made in identifying and addressing policy issues that could contribute to the above results, e.g., seed policy harmonization. These efforts are important in identifying best practices on how to implement an agenda. However, a key challenge for ECAPAPA is the need to identify and clearly articulate an agenda that can deliver on the above results, focus ECAPAPA technical efforts, and connect ECAPAPA activities with current reform efforts and opportunities in the agricultural sector or the research systems more specifically. (Where are the best opportunities for having a meaningful and sustainable impact on the above results? What commodities or products will have the highest payoff from policy interventions?)

2. Regional Policy Context and Outlook

Over the past decade there has been substantial agricultural policy reform in the ECA countries. At the same time, there has been broad based change and reform in the agricultural research systems of ECA countries.

A focus of agricultural policy reform has been market liberalization. This has been aimed at removing government from trade of agricultural goods, and eliminating barriers that affect either the profitability of agriculture, or the ability of producers and traders to access markets. Today, countries in the ECA region are at different stages in implementing liberalization. In some cases there have been policy reversals (e.g., domestic controls of prices and marketing). The unevenness of implementation across countries and the go-stop reversals hinder both investment and participation of the private sector. It also limits regional cooperation in trade, both regionally and internationally. At the same time, globalization is marching on, often leaving Eastern Africa behind, e.g., the Eastern African share of global agricultural trade has declined since 1990.

Ten years ago ASARECA did not exist. Since 1990, NARI and NARS in the region have had substantial structural change, new advisory boards and governance systems have been installed, more flexible finance systems have been established, NARIs have been given authorities and mandates to work with the private sector, and NARs are being confronted with how to have the greatest impact on economic growth. Public sector extension systems have collapsed in many countries. And, the increase in the level of involvement of NGOs in delivering support services to rural communities has been significant. However, financial support has not been forthcoming, and in many cases continues to decline for research in particular. Donors continue to be a major source of funding for agricultural research across the region.

As we look ahead, there are a number of challenges that the ECA region currently does and will continue to face in achieving sustainable economic growth. Policy has a key role in addressing these challenges. Some of the key challenges relevant to the ASARECA strategy and coalition are:

- poverty,
- unemployment,
- food insecurity, and
- environmental degradation.

To address these challenges there are a number of initiatives in their formative stages being developed. They are directly relevant to ECAPAPA's efforts to identify a strategic agenda and partners for policy analysis, dialogue and change. These include:

- poverty reduction strategy process. Poverty reduction strategies are being developed at the country level in most Eastern Africa countries. They are strategic efforts to define and establish policy frameworks and actions needed to reduce poverty.
- agricultural sector improvement programs (ASIPS). ASIPs are ongoing efforts to promote strategic planning and coordination at the sector level. They include efforts to define elements of a policy framework, including the framework for agricultural research support.
- regionalization, including economic integration efforts. Important efforts include COMESA, EAC, ASARECA, IGAD,
- globalization of trade, and emergence of trade protocols, e.g., WTO, Biotechnology protocol, Kyoto protocol.

To be relevant to agricultural policy in the region, ECAPAPA's agenda will need to be able to inform these ongoing efforts to influence and shape policy. At the same time, these ongoing efforts can be very useful in informing a strategic analytic agenda. It is hoped that the mid term review will, among other things, help identify and articulate an agenda that will make ECAPAPA's efforts relevant to these ongoing processes, and be able to deliver on the types of results noted above. Indicative questions that may need to be examined in this process, include: what are the gaps in information needed to shape program interventions and target development efforts? How can you have the greatest impact on economic growth and poverty in rural areas? Where are the greatest differences between countries in the status of their liberalization efforts for common commodities? How does or can ECAPAPA connect with these efforts and affiliated groups?

As noted above, there are substantial changes taking place in the NARS of the region, as well as the context and agenda for regional and international cooperation in agricultural technology development and transfer. To be relevant to this process and agenda, ECAPAPA needs to identify how to best support the efforts of the NARS to effectively argue for, mobilize and effectively allocate resources to achieve impact on economic growth. What information do NARS' leaders need to make decisions and effectively make their case with policy makers? And, what information do policy makers that make decisions about NARS resources and mandate need? How can ECAPAPA's efforts have the greatest impact, realizing that there are neither the financial nor human resources, to address all issues of interest?

3. Purpose, Objectives and Tasks of the Mid Term Review

The purpose of the mid term review is to assist ECAPAPA and the broader ASARECA coalition identify mid course corrections needed (if any) to ensure that the efforts and directions that ECAPAPA is taking have strategic and meaningful impact on the performance of the agricultural sector in the ECA region, and the capacity of the research

systems in particular to service the policy interests of the region. It is anticipated that this review will inform consultations among ECAPAPA stakeholders to identify strategic targets and interventions in agricultural policy, that could reasonably be expected to be successful and could be addressed through ECAPAPA.

The objectives of the mid term review are:

- a) Formulate and review options for a prioritized regional agricultural policy agenda for ECAPAPA and ASARECA for the next 5 to 10 years.
- b) Identify illustrative performance targets as well as the type and level of impact that could be expected and measured from a regional policy agenda in the medium and long term.
- c) Identify best practices to support successful implementation of a prioritized regional agricultural policy agenda.

To address the objectives listed above, the RT will complete the tasks listed below. A work plan to address these tasks will be prepared by the team leader, in consultation with team members and the ECAPAPA coordination unit, prior to the start of the review.

- i. Review various policy initiatives and processes now underway (as noted above), and identify issues of relevance to a regional ECAPAPA agenda. Emphasis should be given (but not limited) to agricultural trade related issues, as well as issues directly affecting productivity and science and technology, including consultations with commercial private sector trade associations and interest groups.
- ii. Examine the range of regional issues emerging from these processes to help clarify the type and level of impact on economic growth that might be expected, if they are successfully addressed.
- iii. Review criteria currently used by ECAPAPA in prioritizing policy issues, and provide recommendations on adjustments (if necessary) to these criteria and the process used to review policy issues relevant to a regional ECAPAPA agenda.
- iv. Drawing on experience and lessons in Eastern Africa, as well as elsewhere in the world, in dealing with the issues identified in two above, provide recommendations on:
 - a. What policy issues have the greatest need and offer the greatest opportunity for impact, for ECAPAPA to address.
 - b. Approaches (options) ECAPAPA could use to effectively address these issues and make its efforts relevant.
 - c. Linkages that could be usefully made with knowledge based groups (public or private), regionally or internationally, with established expertise and experience in forming options to deal with the targeted policy issues,

- v. Review the policy issues now being addressed or proposed for attention by the ASARECA NPPs, and provide recommendations on whether ECAPAPA should deal with these, and if so, provide guidance on how these fit in the ECAPAPA portfolio.
- vi. In selected NARS, review the needs and interests of NARS leaders and policy makers for information and skills to improve mobilization of local (national) funding, and allocation of these resources.
- vii. Examine and describe the types and levels of impact that could be expected if the issues identified by NARS leaders and policy makers are addressed, and provide recommendations on options (themes, topics, approaches) to address them, realizing that there are not sufficient resources to address all issues.
- viii. Develop a matrix of options for a policy agenda, and specify the type of intervention that would likely be needed to address the issue, e.g., analysis, adaptation of existing knowledge to local circumstances, dialogue, establish a reform process.
- ix. Review and discuss options and types of arrangements to strengthen capacity needed to address priority policy issues. (The capacity building efforts of ECAPAPA should be reviewed in this context.)

A list of Some of the Possible Questions

In addressing the TORs above, the following is a list of illustrative questions and concerns that the team may want to review and consider.

- a. What progress (at least in the past 10 years and on specific issues) has been made in the policy environment in Eastern Africa; and what are the key (specific) policy issues limiting agricultural growth, especially policies limiting regional economic cooperation and trade in agriculture?
- b. What approaches have been most successful from a regional platform in addressing and changing agricultural policies in the region and elsewhere in the world. Are there lessons or best practices to help guide implementation? To what extent has ECAPAPA successfully identified and embraced these lessons.
- c. What illustrative criteria that could be used to prioritise the regional agricultural policy agenda as it relates to the ASARECA strategy?

Are there sufficient and appropriate types of capacity skills in the region to analyze, modify and implement the strategic policy issues that currently need attention? And if not, what types of linkages and efforts could be promoted to concurrently improve capacity and improved policy? Is there need for example, to identify possible centers of excellence within the region and internationally to augment these efforts to ensure effectiveness and efficiency in the delivery of the products? Which are these centers and what are the most efficient options and processes of tapping them?

Annex 3. Schedule of Activities and Stakeholder Interviews

UGANDA

Sun. 6 May – Arrival

Mon. 7 May – Entebbe

(co. code 256, city code 41)

(Team meeting, consultation of documents)

ASARECA PO Box 765 Entebbe	Dr. Adiel Mbabu (Technical Officer – Planning) Dr. Abdelmonheim Taha (Tech. Off.- Monit. & Eval.) Mr. Techalew Negash (Finance Officer) <i>asareca@imul.com</i> <i>asarplan@imul.com</i> <i>asarfin@imul.com</i>	ph. 320 556 ph. 320 212 fax 321 126
ECAPAPA PO Box 765 Entebbe	Dr. Isaac Minde (Coordinator) Mr. Geoffrey Ebong, (Program Assistant) <i>ecapapa@imul.com</i>	ph 321 780 ph. 321 751/2 ph. 321 775 fax 321 777

Tues. 8 May – Entebbe

(Consultation of documents)

Weds. 9 May – Kampala

(co. code 256, city code 41)

IFPRI 2020 Vision Network PO Box 28565 Kampala	Dr. Fred Opio (Coordinator, 2020 Vision Network for Eastern Africa) <i>ifprinet@infocom.co.ug</i> Colline House 4 Pilkington Road, Kampala	ph. 234 616 fax 234 614 mob. 077 415 326
Plan for the Modernisation of Agriculture (PMA) PO Box 8147 Kampala	Dr. Peter Ngategize (Resource Person, Plan for Modernization of Agriculture) <i>planmode@infocom.co.ug</i> Room G-37, Treasury Bldg. Min. of Finance, Planning & Economic Development	ph. 349 806 home 531 485 mob. 077 731 485

Weds. 9 May (continued) – Kampala/Entebbe (co. code 256, city code 41)

Private Sector Foundation (PSF) PO Box 6213 Kampala	Mr. Nimrod Wanialla (Director, Private Sector Trade Policy Capacity Building Project) <i>nimrod@infocom.co.ug</i> National Farmers' Association Bldg., Nakasero Rd.	ph. 230 402 mob. 077 221 448
NARO PO Box 295 Entebbe	Prof. Joseph Mukiibi (Director General) <i>mukiibi@imul.com</i> <i>narohq@imul.com</i> Dr. John Aluma (D.D.G. – Research) <i>ddgr@infocom.co.ug</i> Dr. G.W. Otim-Nape (D.D.G. – Outreach) <i>onape@infocom.co.ug</i>	ph. 321 348 ph. 320 512 fax 321 070 mob. 077 508 490 ph. 320 264 (sec.)

Thu. 10 May – Kampala/Entebbe (co. code 256, city code 41)

IDEAS Ltd. PO Box 1442 Kampala	Prof. Jossy Bibangambah (Development Economist/Consultant) <i>ideas@infocom.co.ug</i> UCIL Bldg., Lugogo Show Grounds	ph. 220 946 ph. 507 006 fax 220 946
Makerere Univ. PO Box 7062 Kampala	Prof. E.N. Sibiiti (Dean, Faculty of Agriculture <i>deanf@starcom.co.ug</i> Dr. Bernard Bashaasha (Head, Dept. of Agric. Economics) Dr. Dick Sserunkuuma (Dept. of Agric. Economics)	ph. 542 277 (o) ph. 567 961 (r) fax 531 641
EPRC PO Box 7841 Kampala	Dr. Godfrey Bahiigwa (Senior Research Fellow) <i>bahiigwa@eprc.or.ug</i> Plot 51, Pool Rd., Makerere Univ.	ph. 540 141 fax 541 022
Uganda National Farmers Assoc. PO Box 6213 Kampala	Hon. Chebet Maikut, MP (President, UNFA) Mr. Augustine Mwendya (Chief Exec. Secretary, UNFA) <i>unfa@starcom.co.ug</i>	ph. 230 705 ph. 340 246 fax 255 242

Fri. 11 May –Entebbe

(co. code 256, city code 41)

(consultation of documents plus one interview)

PMA Secretariat PO Box 102 Entebbe	Dr. Willie Odwongo (Director, Plan for the Modernisation of Agriculture Secretariat) Ministry of Agriculture, Animal Industry and Fisheries Plot 2-4 Lugard Avenue Road	ph. 320 123 mob. 077 461 163
---	---	---------------------------------

Sat. 12 May –Entebbe

(co. code 256, city code 41)

(consultation of documents plus one interview)

ASARECA PO Box 765 Entebbe	Prof. Geoffrey Mrema (Executive Secretary, ASARECA) <i>asareca@imul.com</i>	ph. 320 556 ph. 320 212 fax 321 126
---	--	---

Sun. 13 May – Entebbe to Nairobi

(travel)

KENYA**Monday 14 May – Nairobi**

(co. code 254, city code 2)

KARI PO Box 57811 Nairobi	Dr. Romano Kiome (Director General) <i>kiome@arcc.or.ke</i> Dr. Festus Murithi (Head, Socioeconomics & Biometrics)	ph. 583 301 fax 584 434
USAID/REDSO/ESA PO Box 30261 Nairobi ICIPE Campus, Thika Rd., Duduville	Mr. Dennis McCarthy (Chief, Ag. & Nat. Resources Office) <i>dmccarthy@usaid.gov</i> Mr. John Mullenax (Agricultural Advisor) <i>jmullenax@usaid.gov</i> Mr. Mulinge Mukumbu (Program Specialist) <i>mmukumbu@usaid.gov</i> Mr. Daniel Evans (NRM Advisor) <i>devans@usaid.gov</i>	ph. 862 400 - 2 fax 860 562
ASARECA Technol. Transfer Project, CIP PO Box 25171 ILRI Campus, Kabete	Dr. Berhane Kiflewahid (Coordinator, ASARECA TTP) <i>b.kiflewahid@cgiar.org</i>	ph. 632 054 fax 630 005

Tuesday 15 May – Nairobi

(co. code 254, city code 2)

IDRC PO Box 62084 Liaison House State House Avenue	Dr. Luis Navarro (Snr. Programme Specialist) <i>lnavarro@idrc.or.ke</i>	ph. 713 160 fax 711 063
KNFU	Mr. Mwangi (Field Services Officer) [for Mrs. Mercy Karanja, Chief Exec.]	005-2-608 324 - 5
REMPAI PO Box 63806 Nairobi	Prof. Chris Ackello-Ogutu (Executive Director) <i>ackello@arcc.co.ke</i>	ph. 750 129 fax 747 076
AERC PO Box 62882 Nairobi	Dr. Dominique Njinkeu (Deputy Director of Research) <i>njinkeu-aerc@form-net.com</i>	ph. 228 057 fax 219 308

Weds. 16 May – Nairobi

(co. code 254, city code 2)

(Mukhebi and Faki only; Masters and Taha travel to Addis)

Seed Trade Assoc. of Kenya	Mr. Obongo Nyachae (Executive Officer) <i>stak@form-net.com</i>	ph. 713 658 ph. 713 619 fax 713 671
Top Investment & Management Services	Mr. Harris Mule (Managing Director) <i>bdo@net2000ke.com</i>	ph. 252433 fax 331068
Chemagro Ltd.	Mr. Henry Ogola (Managing Director)	ph. 228 121 fax 218 279
Univ. of Nairobi	Prof. Willis Oluoch-Kosura (Head, Agric. Economics Dept)	ph. 632 150 fax 631 815

TANZANIA (Mukhebi & Faki only)**Thurs. 17 May – Dar es Salaam**

(co. code 255, city code 22)

AGRIS PO Box 5737 Dar es Salaam	Mr. Timothy Apiyo (Managing Director) Dr. Cosmus Kamugisha (Economic Development Consultant) <i>agris@intafrica.com</i>	ph. 131 059 fax 231 061
ESRF PO Box 32226 Dar es Salaam	Prof. Sam Wangwe (Executive Director) <i>swangwe@esrf.or.tz</i>	ph. 760 751 fax 760 062

Fri. 18 May – Dar es Salaam/Morogoro (co. code 255, city code 22/23)

DRD Ministry of Agric. PO Box 2066 Dar es Salaam	Dr. Jeremiah Haki (Director) <i>drd@ud.co.tz</i>	ph. 286 5313 fax 286 5312 mob. 0811 601612
	Dr. George Sempeho (Head, Rsch., Planning, Mon. & Eval.) <i>gsempeho@raha.com</i>	ph 286 5322 fax 286 5312 mob. 0812 780 194
Sokoine Univ., Dept. of Agric. Economics PO Box 3007 Morogoro	Dr. Emmanuel Mbiha (Head of Dept.) <i>mbiha@suanet.ac.tz</i> Dr. Andrew Temu (<i>atemu@suanet.ac.tz</i>) Dr. Florens Turuka (<i>sift@suanet.ac.tz</i>) Dr. Anacleto Kashuliza <i>kashuliz@suanet.ac.tz</i>	ph 260 3415 ph 260 4691 fax 260 3718 mob 0741 530 316 (for Andrew Temu)

ETHIOPIA (Masters and Taha only)**Weds. 16 May – Addis Ababa (co. code 251, city code 1)**

SG 2000 PO Box 12771 Addis Ababa	Dr. Marco Quinones (Country Coordinator) <i>m. quinones@cgiar.org</i> Mr. Tekele Gebre <i>sg2000@telecom.net.et</i>	ph. 51 05 84 (ofc.) ph. 60 09 87 (res.) fax 51 08 91
---	---	--

Thurs. 17 May – Addis Ababa (co. code 251, city code 1)

EDRI PO Box 1128 Addis Ababa	Dr. Tenkir Bongor (Team Leader, Ag. & Nat. Resources) <i>edri@telecom.net.et</i>	ph. 55 22 44 ph. 56 26 54 fax 55 20 20
OSSREA PO Box 31971 Addis Ababa	Dr. Tegegne Teka (Regional Project Coordinator) <i>ossrea@telecom.net.et</i> <i>www.ossrea.org</i>	ph. 55 11 63 fax 55 13 99

Fri. 18 May – Addis Ababa (co. code 251, city code 1)

ILRI PO Box 5689 Addis Ababa	Dr. Simeon Ehui (Coordinator, Livestock Policy Anal.) <i>s.ehui@cgiar.org</i>	ph. 61 34 95 fax 61 18 92
EARO PO Box 2003 Addis Ababa	Dr. Seyfu Ketema (Director General) Dr. Tesfaye Zegeye (Head, Socio-Economic Dept.) <i>iar@telecom.net.et</i>	ph. 61 25 72 fax 61 12 22
Addis Ababa Univ. PO Box 5563 Addis Ababa	Dr. Mulat Demeke (Assoc. Dean, Fac. of Business & Economics) <i>aderay@un.org</i>	ph. 53 39 00 fax 55 22 27

UGANDA**Tues. 22 May – Kampala/Kawanda****(co. code 256, city code 41)**

AHI PO Box 6247 Kampala	Dr. Ann Stroud (Coordinator) <i>a.stroud@cgiar.org</i>	ph. 566 722 fax 567635 mob. 075 720 732
--------------------------------------	---	---

Thurs. 24 May –Entebbe**(co. code 256, city code 41)**

EARRNET (IITA) PO Box 7878 Kampala	Dr. Jim Abaka Whyte (Coordinator) <i>j.white@imul.com</i>	ph. 223 445 fax 223 494
---	--	----------------------------

Annex 4. Questionnaire Used to Solicit Stakeholder Views through E-mail

The following Questionnaire was sent to 280 E-Mail Addresses to Solicit Stakeholder Views:

Dear colleague,

This email is to request your input into a mid-term review we are conducting of ECAPAPA (the East and Central Africa Programme for Agricultural Policy Analysis), a three-year-old initiative of ASARECA (the Association for Strengthening Agricultural Research in Eastern and Central Africa). ECAPAPA activities are currently funded by USAID, IDRC, CTA and SDC, with total expenditure of US\$647,000 in 2001.

The purpose of the mid-term review is to assist ECAPAPA and the broader ASARECA coalition to identify mid-course corrections needed (if any), to ensure that the efforts and directions that ECAPAPA is taking have strategic and meaningful impact on the performance of the agricultural sector in the ECA region. ECAPAPA's activities are expected to have a direct impact on policy-making, and also to improve the long-run capacities of the region's research systems to inform and respond to policy.

The Mid-Term Review Team is led by Dr. Adrian Mukhebi, the Executive Director of the Kenya Agricultural Commodity Exchange, with Prof. Hamid Faki of the Agricultural Research Corporation in Sudan, and Prof. William A. Masters of Purdue University. The review is being conducted from May 5th to 28th, and will include interviews with selected stakeholders in Ethiopia, Kenya, Tanzania and Uganda. Since we cannot visit personally with everyone, we are turning to this email survey for complementary information.

You have been selected for this survey because you have been receiving ECAPAPA's weekly newsletter, and are considered by ECAPAPA to be among their key stakeholders. Despite your busy schedule, we hope you will be able to answer our few open-ended questions provided below, using the "respond" feature of your email software and entering your views below. These are the key questions for which we anticipate that your input might have the greatest impact on ECAPAPA's future. Feel free to respond to these questions as briefly as you wish, or in as much detail as you can. In addition to your consideration of these questions, you may wish to enter your views on other issues of potential concern to ECAPAPA as well. Please respond in consideration of your own personal views, as well as those of your institution. Your response will be used in strict confidence by the RT only. We may use quotations from your responses in our report, but without attribution to specific respondents.

We will be compiling the results of this email survey on Monday, May 21st. We will be most grateful to receive your comments by this date

With many thanks for your kind cooperation,

The Mid-Term Review Team

QUESTIONS FOR ECAPAPA MID-TERM REVIEW

1. HOW WOULD YOU CHARACTERISE YOUR LEVEL OF AWARENESS OF ECAPAPA ACTIVITIES?

2. TO THE EXTENT THAT YOU ARE AWARE OF ECAPAPA'S ACTIVITIES, HOW WOULD YOU CHARACTERISE THEIR RELEVANCE TO YOUR WORK AND TO THE AGRICULTURAL POLICY ISSUES THAT CONCERN YOU?
3. TO THE EXTENT THAT YOU ARE AWARE OF THEM, HOW WOULD YOU CHARACTERISE THE IMPLEMENTATION OF ECAPAPA'S ACTIVITIES, IN TERMS OF THEIR COST-EFFECTIVENESS AND IMPACT ON POLICIES THAT CONCERN YOU?
4. WHAT POLICY ISSUES DO YOU THINK ECAPAPA SHOULD ADDRESS OVER THE NEXT THREE TO FIVE YEARS? IN ANSWERING THIS QUESTION, PLEASE CONSIDER THE SUPPLY AND DEMAND FOR NEW TECHNOLOGY, THE TRANSACTION COSTS AND CONSTRAINTS ON TRADE AND INVESTMENT, AS WELL AS ANY OTHER ISSUES AFFECTING SUSTAINABLE ECONOMIC DEVELOPMENT AND POVERTY ALLEVIATION.
5. AS YOU MAY KNOW, ONE OF ECAPAPA'S INITIATIVES IS TO HELP INTRODUCE COMPETITIVE GRANT MECHANISMS TO THE FUNDING OF POLICY RESEARCH ACTIVITIES IN THE REGION.
 - a) ARE YOU LIKELY TO BE INTERESTING IN APPLYING FOR COMPETITIVE GRANT FUNDS OVER THE NEXT FIVE TO TEN YEARS?
 - b) IF SO, DO YOU THINK YOU ARE NOW ABLE TO COMPETE SUCCESSFULLY FOR SUCH GRANTS?
 - c) IN COMPETING FOR GRANTS, WHAT DO YOU CONSIDER TO BE YOUR GREATEST STRENGTHS, AND FOR WHAT KINDS OF POLICY RESEARCH ACTIVITIES?
 - d) IF NOT, WHAT DO YOU CONSIDER TO BE YOUR GREATEST WEAKNESSES, AND WHAT CAPACITY-BUILDING INITIATIVES MIGHT HELP YOU TO OVERCOME THOSE CONSTRAINTS?
6. PLEASE USE THE SPACE BELOW TO ADDRESS ANY OTHER ISSUES OF CONCERN THAT ECAPAPA SHOULD ADDRESS OVER THE NEXT FIVE TO TEN YEARS?

Annex 5. Some of the Documents Consulted

ECAPAPA (2001). *Some Highlights on ECAPAPA: Past, Present and Future* (32 pages).

ASARECA (2000). Report on the Activities of the ASARECA Secretariat for the Period 01 January 1999 to 31 December 1999 and Annual Workplan for 2000; ASARECA, Entebbe.

ECAPAPA (2000). *ECAPAPA Stakeholders' Directory*: December 2000.

ECAPAPA (1998). *Progress Report: September 1997-October 1998 (Report of the coordinator of ECAPAPA to the third regional ECAPAPA steering committee meeting, 16 November 1998)*.

ECAPAPA (1998). Progress Report, 17 September 1997 – 30 October 1998

ECAPAPA (2000). ECAPAPA Proposed Activities and Workplan for the Period August 1999 to December 2000.

ECAPAPA (2000). report on the Activities of ECAPAPA supported by the International development Centre (IDRC); September 1997 –August 2000.

ASARECA (2000). *A report of the second regional workshop on harmonization of seed policies and regulations in Eastern Africa: 26-30 June 2000, Arusha, Tanzania* (54 pages).

ASARECA (2000). *Proceedings of the first regional workshop on harmonization of seed policies and regulations in Eastern African, 4-8 April 2000, Entebbe, Uganda* (approx. 60 pages).

Mulat Demeke (2000). "Agricultural Technology and Poverty in Ethiopia" (52 pages).

Luis Navarro. "Comments on ECAPAPA Mid-Term Review." Email to Isaac Minde, dated April 25, 2001 (2 pages).

David A. Nyange, "Policy Analysis and Data Management Project: Building Capacity of Local Institutions to Undertake Policy Analysis from Agricultural and Household Surveys, and Data Management." Project Proposal, May 2001. Morogoro, Tanzania: Department of Agricultural Economics and Agribusiness, Sokoine University of Agriculture.

IFPRI 2020 Vision Network (2001). "List of Approved Research Proposals", proposal guidelines and other information regarding their competitive grant program.

KARI (1999). *Proceedings of the Second KARI Socio-Economics Conference* (98 pages).

ATPS (n.d.). "African Technology Policy Studies Network" (two-page brochure)."

ATPS (2000), *ATPS News*, No. 8 (January-December), 8 pages.

AERC (n.d.). "AERC/CREA: Objectives, Structure and Programme" (two-page brochure).

AERC (2000). *AERC/CREA Research News*, No. 5 (November), 16 pages.

KNFU (n.d.). "KNFU: Voice of all farmers in Kenya" (two-page brochure).

EARO (1999). *The Socio-Economics Research Strategy*, 42 pages.

OSSREA (2000). OSSREA: March 2000 (two-page brochure).